The British Museum

Kushan Coins and History: A Type Catalogue of Kushan, Kushano-Sasanian and Kidarite Hun Coins Based on the Collection of the British Museum

Volume One

Joe Cribb and Robert Bracey

Research
Publication
191

Kushan Coins and History: A Type Catalogue of Kushan, Kushano-Sasanian and Kidarite Hun Coins Based on the Collection of the British Museum

Volume One

Joe Cribb and Robert Bracey

The British Museum

This publication is dedicated to Neil Kreitman in recognition of his immense contribution to Kushan and Gandharan studies at the British Museum

This project has received funding from the European Research Council (ERC) under the European Union's Seventh Framework Programme (FP7/2007–2013) (grant no. 609823)

Publishers
The British Museum
Great Russell Street
London WC1B 3DG

Series editor
Sarah Faulks

Kushan Coins and History: A Type Catalogue of Kushan, Kushano-Sasanian and Kidarite Hun Coins Based on the Collection of the British Museum
Joe Cribb and Robert Bracey
With the assistance of Gul Rahim Khan and Pankaj Tandon

ISBN 9780861591916
ISSN 1747 3640
doi: 10.48582/p2a1-p885
The Open Access version of this publication is made available under a CC-BY-NC-SA 4.0 Licence

© 2025 The Trustees of the British Museum
Text © 2025 Joe Cribb and Robert Bracey
All rights reserved. No part of this work may be utilised or reproduced in any way by any electronic, mechanical or other means, including but not limited to photocopying and recording, or in any information storage and retrieval system, or to develop or train any generative machine learning artificial intelligence models or related technologies, without prior permission in writing from the publisher.

Front cover: gold dinar of Vasudeva I, showing the king standing making an offering at a small fire altar on the obverse and the Kushan god Oēsho with three heads and four arms standing before a bull on the reverse (cat. no. 2225: F.G2-ii 1d (1E/3a), British Museum, 1893,0506.28)

Printed and bound in the UK by 4edge Ltd, Hockley
Papers used by the British Museum are recyclable products made from wood grown in well-managed forests and other controlled sources. The manufacturing processes conform to the environmental regulations of the country of origin.

All British Museum images illustrated in this book are © 2025 The Trustees of the British Museum
Further information about the Museum and its collection can be found at britishmuseum.org

Contents

Volume One

Acknowledgements v

1. Introduction 1

2. History of the Kushans and their Successors 20

3. Kushan Coinage 139

4. The British Museum Collection of Kushan, Kushano-Sasanian and Kidarite Hun Coins 272

Appendix 1 Specific Gravity and Gold Purity 297

Appendix 2 Inscriptions on Kushan, Kushano-Sasanian and Kidarite Hun Coins 302

Bibliography 330

Index 349

Volume Two

Introduction to the Catalogue and How to Use It 369

Catalogue

Series A: Kujula Kadphises 377
Series B: Wima Takto 411
Series C: Wima Kadphises 435
Series D: Kanishka I 451
Series E: Huvishka 499
Series F: Vasudeva I 605
Series G: Kanishka II 647
Series H: Vasishka 659
Series I: Kanishka III 669
Series J: Vasudeva II 673
Series K: Mahi 685
Series L: Shaka 687
Series M: Kipunadha 695
Series N: Meśra 703
Series O: Kirada and the Early Kidarites 705
Series P: Peroz 709
Series Q: Kidara 715
Series R: Ardashir I 723
Series S: Ardashir II 725
Series T: Peroz I 731
Series U: Hormizd I 747
Series V: Hormizd II 779
Series W: Peroz II 783
Series X: Shapur II 789
Series Y: Varahran 797
Series Z: Kidara and Successors 829

Concordance 859

Acknowledgements

This volume would not have been possible without the work of our forerunner Robert Göbl of the University of Vienna, whose two major books on Kushan coins in 1984 and 1993 have long served as the major resource for their study. Our intention is not to replace his research, but to honour him and to build on his achievements. We are also conscious of our debt to many other scholars who have worked on this subject and wish particularly to mention Yevgeny Zeymal, Edvard Rtveladze, Michael Mitchiner, John Rosenfield, B.N. Mukherjee, Gerard Fussman, David Jongeward, David Bivar, A.K. Narain and David MacDowall. As Isaac Newton said 'we stand on the shoulders of giants'.

Underlying their contributions we are also aware of the efforts of many of our predecessors in building the British Museum collection of Kushan coins, particularly of the private individuals whose collecting activities have formed its core, including Charles Masson (aka James Lewis), James Prinsep, Sir Alexander Cunningham, R.B. Whitehead, Major P.M. Hay, Indraji Bhagvanlal, Bob Senior and Robert Tye (for more details of how the collection was formed see Chapter 4). There is no doubt that new material will substantially revise the picture presented here, and we hope to have pointed to potential fruitful areas for future research, particularly the late Kushan copper.

The construction of this work has also relied upon the practical generosity of many individuals and institutions in providing financial support for the work involved. First among these is Neil Kreitman who through his Foundation offered continual support over several decades for research on Kushan and related coinages both in the British Museum and in the Ashmolean Museum. His support in many spheres for the study of ancient Afghanistan and Pakistan has been remarkable. We hope the dedication of this volume to him marks the esteem with which his long-standing support is appreciated both by us and by the broader community devoted to telling the story of this important ancient region, often called 'the Crossroads of Asia', the title of the 1992 exhibition at the Fitzwilliam Museum, Cambridge, and its associated catalogue (Errington and Cribb 1992), both of which he so generously funded through the Ancient India and Iran Trust, Cambridge. Thanks are also due to Mehdi Malek, William and Katie Barrett, Professor Ikuo and Mrs Michiko Hirayama, Professor Katsumi Tanabe and Vikramm Chand for their practical support. Institutions which have also supported this work financially are the Royal Numismatic Society, the British Museum, British Museum Society Townley Group, the Leverhulme Trust and the European Research Council through the project *Beyond Boundaries: Religion, Region, Language and the State* (project number 609823).

Without the assistance of institutions and collectors it would not have been possible to produce this account of the Kushan and related coinage systems. The authors have generously been given practical support in compiling this catalogue from many institutions, organisations and individuals. We would particularly like to thank Wolfgang Hahn and Hubert Emmerig, Department of Numismatics and Monetary History (Institut für Antike Numismatik), University of Vienna, who enabled us to consult and record specimens from the department's card index of Kushan

coins created by Robert Göbl, without which this volume would be sadly diminished. Likewise we also thank Michael Alram and Klaus Vondrovec, Kunsthistorisches Museum, Vienna; Amiteshwar Jha and K.K. Maheshwari, Indian Institute of Research in Numismatic Studies, Nasik; Shailendra Bhandare and Chris Howgego, Ashmolean Museum; all the staff of the Mathura Museum; all the staff of the Taxila Museum; Graham Shaw and his colleagues, India Office section, British Library; Balász Karpossy and Daniel Schmutz, Bernisches Historisches Museum, Bern; Terry Volk and Adi Popescu, Fitzwilliam Museum, Cambridge; the staff of the Indian Museum, Kolkata (Calcutta); Naushaba Anjum and Iffat Azeem, Lahore Museum; Hermann Simon and Karsten Dahmen, Staatlische Museen, Berlin; Wang Yue, Shanghai Museum; Li Jianing, National Museum, Beijing; Ute Wartenburg and the late Peter Donovan, American Numismatic Society, New York; Ellen Feinstein and the late Ray Hibert, Smithsonian Museum, Washington; Konstantin Kravstov and the late Yevgeny Zeymal, Hermitage Museum, St Petersburg; and Abdurahmon Sharifzoda and Mirali Karimdodov, National Museum, Dushanbe.

The most important institution in the creation of this publication has been the British Museum and there are many colleagues both present and past who have supported us in this work. We wish particularly to thank our colleagues Elizabeth Errington, Helen Wang, Vesta Curtis, Kay Rienjang, Paramdip Khera, Sangamithra Choudree, Doug Osto, John Perkins, Kirstin Leighton-Boyce, Piers Baker, Chantal Fabrègues, Sushma Jansari and the late Nicholas Lowick, who have worked or volunteered as part of the team focused on the Museum's Asian coin collection. One of the most important contributions made by our colleagues has been the inspiration for many aspects of this volume flowing from the Masson project on finds from Begram led by Elizabeth Errington. Of a similar nature has been the work on Kushan coins found at Taxila by our collaborator Gul Rahim Khan of the University of Peshawar, vital for understanding the distribution of Kushan coins between these two sites and the location of Kushan copper mints. Our other collaborator, Pankaj Tandon of Boston University, has played an equally vital role in opening up both his collection and his research to us and we acknowledge what we owe to them all. We are also deeply indebted to the support of our former colleagues Andrew Burnett and Philip Attwood for their patient, gentle and welcome encouragement of us during the long journey of preparing this publication – most particularly for their reassurance that we would not live long enough for this to become the most overdue piece of work in the Museum.

Collectors have played an important and large role in our understanding of the ancient coinages of Afghanistan and its neighbours. Apart from the collections now housed in the British Museum (Chapter 4) and other institutions we have been greatly helped by the generous cooperation of many individual collectors who have made their collections available to our research and we wish to thank them all, particularly Heinz Bons, Peter Linenthal, Aman Ur Rahman, Pankaj Tandon, Gunter Roth, Vikramm Chand, Bob Senior, Craig Burns, Wilfred Pieper, John Suidmak, Andrew Oddy, Barbara Mears, Sam Moorhead, Hans Loeschner, François Widemann, John-Pierre Righetti, David Smith, Alek Raia, Shafqat Mirza, K.K. Maheshwari, Klaus Grigo, Robert Tye and the late Thomas Mallon-McCorgray, Barry Murphy, David Smith, Larry Adams and Professor Ikuo Hirayama.

We are also grateful to the many scholars whom we have consulted during the preparation of this volume, particularly Stefan Baums, Nicholas Sims-Williams, Harry Falk, Stefan Heidemann, Nasim Khan, Katsumi Tanabe, David Jongeward, Kay Rienjang, Naushaba Anjum, Nicholas Schindel, Terry Hayes, Dilip Rajgor, Bob Senior, Michael Willis and François Thierry, and our late and much-missed colleagues Nicholas Lowick, Martin Price and Wladimir Zwalf. Their wise advice has played a large part in the shaping of our research for this volume. We also thank the numerous people whose individual comments, encouragement and engagement over many years have been invaluable but whose names are too many to be mentioned here.

We would particularly like to thank several colleagues for their practical role in advising on the production of these volumes: Gul Rahim Khan, Elizabeth Errington and Barbara Mears, who at various points carefully read through the catalogue pointing out inconsistencies, errors and typos. That is undoubtedly the dullest part of assisting with a work of this sort and so we feel particularly indebted to them. We would also like to thank Mike Skinner, Lauren Morris, Helen Wang and Amelia Dowler who read the penultimate draft of the text and critically engaged with a variety of arguments therein, helping us to clarify and refine our thinking and presentation. Thanks also to the anonymous peer reviewers who advised the Museum on this publication.

The metallurgical data used in this publication were prepared by Andrew Oddy, former head of Scientific Research, as well as Duncan Hook and Maxime Callaewert, both formerly of the British Museum's Department of Scientific Research. We are grateful for many discussions of the practical interpretation of results. We are also indebted to the memory of our late colleague Keith Howes who pioneered so much of the Specific Gravity work on the British Museum coin collection.

Our particular appreciation is due to Sarah Faulks for her management of the production and publication of the volume as well as for her patience and good humour with what must have seemed a perverse desire to deviate from standard formats. We are also grateful for the hard work done by Edward Hulme on the layout of the catalogue and for the much-appreciated diligence of Rachel Tyson, the best of copy editors. We also thank the indexer Nicola King.

Finally, and most importantly, our sincere thanks are due to our families. Joe would like to thank his partner Linda Crook and his children and grandchildren and close friends who have endured this long journey with him over many years, remembering with love and sadness Margaret Cribb and Steve Cribb who both saw the project begin but unfortunately are no longer with us to see it finally reach its completion.

Joe Cribb and Robert Bracey
July 2025

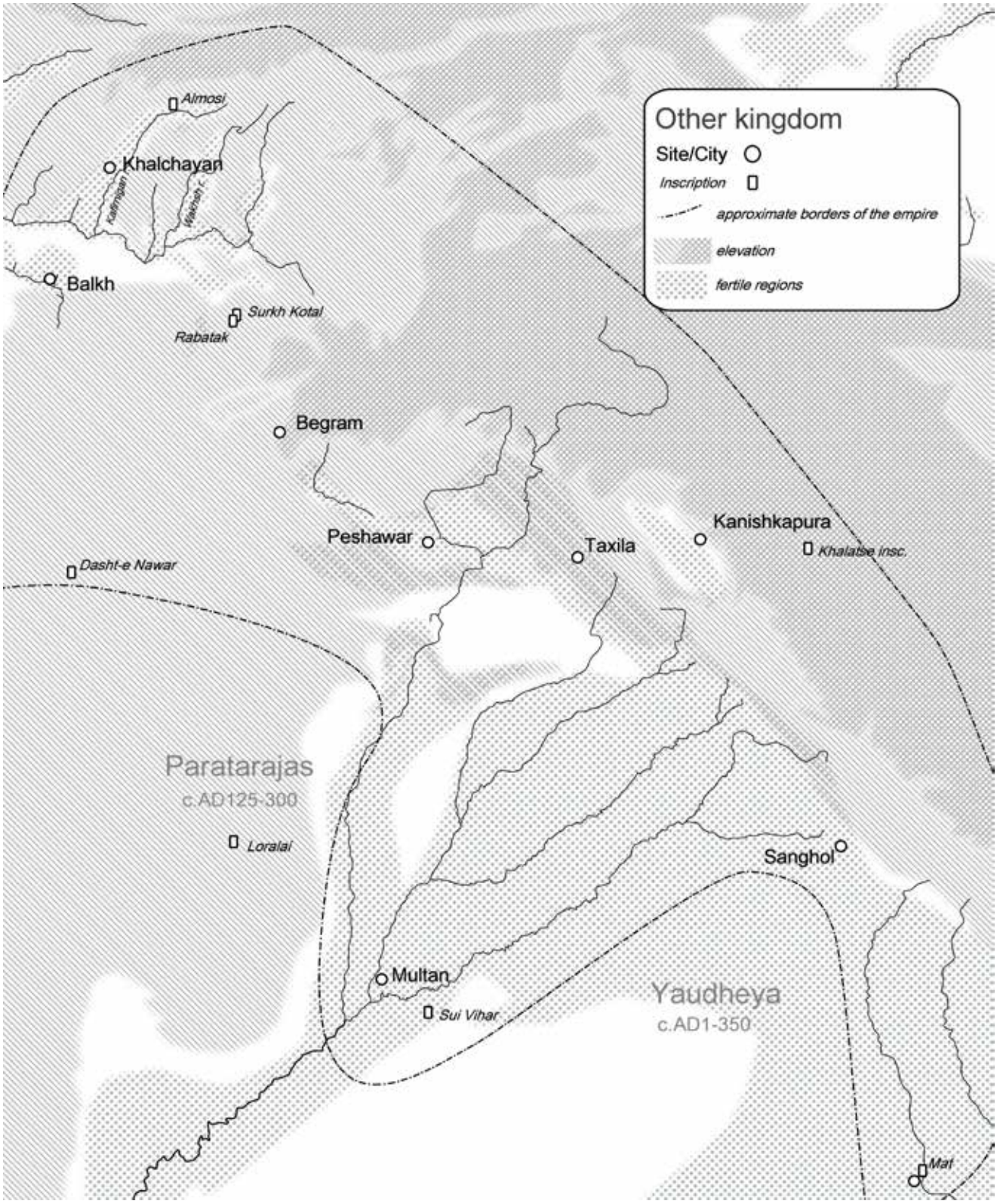


Figure 1.1 Major sites and inscriptions associated with the Kushan Empire

Chapter 1
Introduction

1. What is this work about?

This publication covers Kushan coinage in a broad sense, including the coins of the Kushan dynasty itself and those of the dynasties, Kushano-Sasanian and Kidarite, which claimed to succeed it. The term Kushan refers to a dynasty of 13 kings who ruled from approximately AD 50 to 350, and to the empire they ruled. At the height of their power they ruled from their original centre around the upper Amudarya river (south-western Tajikistan, northern Afghanistan, south-eastern Uzbekistan), through Pakistan and into northern India (**Fig. 1.1**). In the 3rd and 4th centuries the Kushano-Sasanians and the Kidarites conquered parts of Kushan territory, took over their titles and imitated their coinage.

The Kushans were a major dynastic power in the early centuries AD. They were the first dynasty to introduce a regular gold coinage in South Asia, and ruled at a time of major social and religious change. Both they and their coins have received more attention than any other Central or South Asian dynasty of the early 1st millennium. The collection of coins in the British Museum is probably the most comprehensive in the world, and that coinage is an important source for all aspects of this period.

This publication is intended for anyone interested in Kushan studies – archaeologists, historians of art, religion, statecraft and culture, linguists, epigraphists, curators and collectors – as a tool for understanding and using coins as primary sources for historical study. It is relevant to the study of northern India, Pakistan, Kashmir, Afghanistan and neighbouring regions from the 1st to the 4th century. It seeks to answer a series of questions which have dominated Kushan studies through the 20th century by establishing a firm evidentiary basis for its political history. The main purpose is to render one of the key primary sources, the coinage, accessible to a wide range of scholars.

In terms of Kushan studies there are several significant gains to be made in laying out the evidence in this way. Firstly, with this publication a comprehensive type catalogue of the coins of the Kushan dynasty and those coinages which directly succeed them becomes available to numismatists and archaeologists. The further numismatic research this makes possible will be explored later in the introduction (§2.2.5 and §3.1). Secondly, this publication presents a dynastic history which accurately reflects what the evidence tells us about the chronology of the coins and of the state that issued them. There have been huge strides in understanding the chronology of the early centuries AD in the last 50 years but the lack of a single work drawing those advances together has led to many misunderstandings. Thirdly, the publication places the Kushans and their coinage in a historical context. Contemporary states, the development of Buddhist art, trade and other topics are situated in relationship to the numismatic evidence and dynastic history. In the past the Kushans have often been treated in isolation both to the detriment of Kushan studies and South and Central Asian history more widely. Finally, this publication devotes attention to the royal image of each king. Coins neither originated nor promoted the royal image, but rather used existing imagery to signify the authority which backed their monetary use. They therefore

reflect rather than create pre-existing representations of royalty such as court ceremonial, probably manifested in painting or sculpture, and earlier coin imagery. The copying and reinterpretation of earlier coin imagery was a distinctive characteristic of Kushan coin design, as continuity of coin design plays an important part in reinforcing the authority of the coinage system. Used with care the coins provide our best account of how the king, and by extension the state, was represented. The systems of representation established by the Kushans continued to play a role in coin design in South and Central Asia for centuries after the Kushan empire ceased to exist.

Those, of course, are deductions rather than arguments. If this work has a central argument it is that coins are an important source for understanding all aspects of Kushan studies. They have the potential to inform us about chronology, iconography, economics, society, identity and trade. The potential for coins to inform our understanding has not yet been fully realised. This work highlights that potential and attempts to make these primary sources more widely accessible.

1.1 How this work is arranged

The core element of this work is a type catalogue (Volume 2) based principally on the collection of Kushan, Kushano-Sasanian and Kidarite Hun coins in the British Museum. It is on this type catalogue that everything else builds. The British Museum collection contains the largest group of Kushan gold coins in any public collection in the world, and has had a central part in the historiography of Kushan studies (discussed in §2.2 below). The catalogue situates the coins within a numismatic typology which reflects over 40 years of research, since the publication in 1984 of Robert Göbl's *System und Chronologie der Münzprägung des Kušānreiches*. To fully illustrate that typology, additional examples are drawn from other private and public collections wherever a gap exists in the British Museum. This is the first time that a comprehensive type catalogue of Kushan coins has been attempted.

The catalogue is complemented by two further chapters in this publication. Chapter 2 reconstructs in detail a dynastic history of the Kushan empire by reading the numismatic evidence alongside epigraphic, textual and archaeological data while Chapter 3 presents a commentary on the production of Kushan coins. These two chapters are the core interpretative framework for the catalogue and were written in conjunction with it. Additional parts, consisting of Chapter 4 on the history of the British Museum collection, this introduction, which focuses on Kushan historiography and issues of methodology, and the appendices, are all intended to contextualise the catalogue and these commentaries on Kushan history and Kushan coinage.

Readers may, of course be interested in just one aspect of this publication, and it has been divided with that in mind. A reader who wishes to skip the discussion of previous Kushan studies or our theoretical discussion of method in this introduction will, we hope, find the dynastic history in Chapter 2, or the discussion of coin production in Chapter 3, clear without it. In many cases we expect readers might wish to use this as a reference work, focusing on particular aspects. The use of similarly coded section headings in the catalogue as well as Chapters 2 and 3 is intended to aid the reader in using the work in that way, as are the subdivisions into sections and cross-referencing in the text.

This introduction reflects on this publication in several ways. It begins, first, by introducing the arrangement of the publication and how it is conceptualised (see §1.2 below). Then it discusses the importance of the British Museum collection (see §1.3 below). After this the introduction becomes more theoretical, situating the decisions made in relation to existing academic discourse: prior publications on Kushan numismatics (see §2.2); to Kushan studies in general (§2.3); and wider historical studies, particularly changes in methodology (§2.4). Finally, the introduction explores the implications this evidence has for historical study, in terms of what future numismatic research is left open and facilitated by this publication (see §3.1 below), for chronology more broadly (§3.2) and for archaeology (§3.3).

1.2 Concept of this publication

At its core (the type catalogue and Chapters 2 and 3) this publication attempts to establish an evidentiary basis for Kushan studies, in regard to numismatics. By organising and categorising that evidence, establishing the arguments on which that organisation is possible, and illustrating the possibilities and limits of interpretation for one significant thread of Kushan studies (dynastic/political history) it is hoped it will place the coins at the disposal of a much wider range of historians. Readers may wish to imagine this as depicted in **Figure 1.2**. At the base are the primary sources themselves – principally the coins. The catalogue does not present those primary sources directly – rather it is filtered through the practice of collection, both institutional (primarily the British Museum) and private, and the sorting and ordering of coins within those collections which is a response to prior numismatic study, stretching back to the 19th century (see §2.2 below). The type catalogue itself represents the first layer of secondary sources, on which is superimposed our narrative of coin production (Chapter 3). On that is based the reconstruction of dynastic history (Chapter 2), each in turn building on the one before, and each representing both a greater degree of interpretation, and thus distance from the primary sources, but also greater potential historical implications. It is at that final level that the coins are brought most directly into conversation with other sources, particularly epigraphy. We may appear to be asking the reader to read the material in reverse – from our final statement to the original source – but that is somewhat illusory. That Chapter 3 focuses on production, rather than say design, distribution, wear, use or response, is because Chapter 2 is a dynastic history, and production (which is part of a political system) speaks more closely to that than does circulation or deposition. In the same way the focus on production drives the presentation of the catalogue, particularly its division into classes by production centre and phase, which itself responds to a historiography that has determined the filtering of the sources themselves. The fact that the coinage is primarily accessible through public collections lends itself more readily to a reconstruction of minting practice, which in turn lends itself to a dynastic history. Numismatic knowledge is the result of an iterative

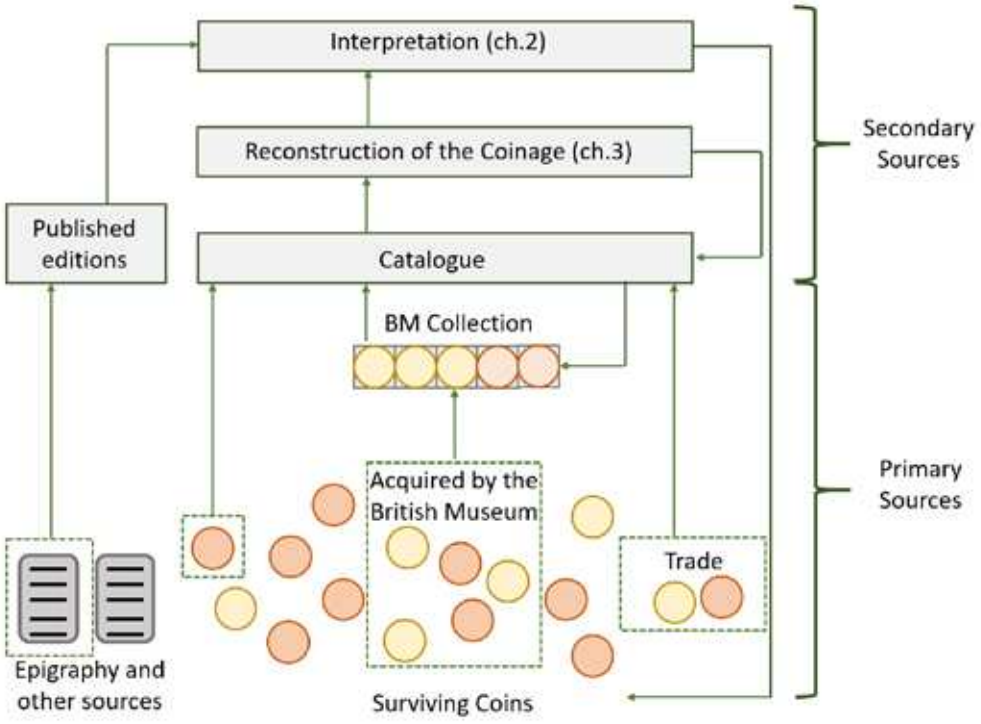


Figure 1.2 Diagram of relationships between interpretation and evidence articulated in this publication

process, building on and refining previous understandings (Cribb 2006, 502–11), often in response to new discoveries (see §2.3.4 below), and this catalogue represents simply a snapshot of one particular moment.

A publication such as this always requires choices. Why, for example, have we chosen to centre the publication around the British Museum collection, which is among the more extensively published? Why have we chosen to present a type rather than a die catalogue, or to eschew a sylloge that simply published the British Museum's collection? Why does the text focus primarily on the production of coinage? Why a dynastic history? The answers depend on previous studies and the authors' understanding of historical and numismatic method, which will be explored in the following sections.

Also important for us to draw attention to is how this publication might inform other aspects of Kushan studies and other fields interested in the history of ancient India or the early centuries AD in Central Asia. It is the contention of this publication that Kushan coins, in the broad sense of this catalogue, have very wide implications for historical study, and that the presentation in one place of a detailed account of their production is desirable for a number of reasons.

1.3 Nature of the British Museum collection

Publication of the British Museum collection began in 1841 but it has only ever been published in part (see Ch. 4 and §2.2.1 below). It is hard to assign a straightforward figure to the size of the British Museum's collection, because definitions of what exactly is, or is not, a Kushan coin vary. In this catalogue, examples from the British Museum are numbered sequentially and the last coin associated with the Kushan dynasty is numbered 3667, while the last coin of one of their successors is numbered 4747. There are a few coins included whose authenticity is open to question (see for example cat. 252/M-imit.C4-i 1u), which would reduce the number. In some cases a group of coins is stored separately and not counted here. For example a pot hoard of 47 copper coins (reg. no. WAA179. 1–47) collected by Aurel Stein were found near the village of Kukrani (Kakrani in Sargodha District, Punjab) during his survey of the archaeological sites of the Jhelum region (Stein 1937, 65–6). The hoard consisted of two coins of the Kushano-Sasanian king Hormizd I (type U.C2-iii, weighing 3.14 and 3.18g), one coin of the Kushan king Shaka (type L.C1-i, obverse 1J, weighing 3.14g) and 44 examples of imitations of Kushan coins (F-imit.C4, ranging in weight from 1.83 to 4.53g, and averaging 3.1g). But those coins are stored with the collection of Aurel Stein and not included in this catalogue. And of course a number is only ever a snapshot: museums acquire coins over time, and on some occasions they may dispose of them, so it would be better to talk in generalities, and say that the British Museum has approximately 4800 examples of Kushan and Kushan-related (e.g. Kushano-Sasanian and Kidarite Hun) coins in its collection.

The scale of the British Museum collection in comparison with other collections is a good indication of its importance (see **Table 1.1**). The only published collection which is larger is that of the Taxila Museum which, according to the latest count, holds over 5000 Kushan coins excavated from the ancient city and its environs (Khan 2007a; 2008a; 2009a; 2010a; 2014; Khan and Cribb 2012). The American Numismatic Society collection was published using a similar methodology and that publication (Jongeward and Cribb 2015) included 2638 coins, approximately half the size of the Taxila and the British Museum collections. The Bern Museum in Switzerland has 1623 coins. They were published by Robert Göbl (1993a) whose numismatic methodology has played an important role in shaping Kushan studies and to which this type catalogue partly responds (see §2.2 below). The Lahore Museum (Whitehead 1914) and the Indian Museum Kolkata (formerly the Indian Museum, Calcutta)

Public collections	No. of coins	Publications
Taxila Museum (according to excavation reports)	*c.* 5166	Marshall 1951
Taxila Museum (actual)	*c.* 5150	Khan 2007a; 2008a; 2009a; 2010a; 2014; Khan and Cribb 2012
British Museum	3667	This publication
American Numismatic Society, New York	2313	Jongeward and Cribb 2015
Bern Museum	803	Göbl 1993a
Peshawar Museum	637	Ali *et al.* 2004
Lahore Museum	509	Whitehead 1914
Bangladesh National Museum	*c.* 400	Ahmed and Al Hasan 2014
Indian Museum Kolkata	317	Smith 1906
Indian Museum Kolkata (supplementary)	132	Bindyabod 1923
National Museum of Pakistan, Karachi	199	Khan 2009b; 2009c; 2010b Total here only includes gold coins and issues of Kanishka I and Huvishka
Shanghai Museum	192	Du 2012
Hermitage Museum, St Petersburg	156	Zeymal 1967
Kandahar Museum	109	MacDowall and Ibrahim 1978
National Museum, Herat	35	MacDowall 1979
Taka Museum of Bangladesh Bank	34	Ahmed and Al Hasan 2014
National Museum, Warsaw	13	Smagur 2016
Himachal State Museum, Shimla	1	Gupta 1988b

Table 1.1 Published collections of Kushan coins and their imitations, totals not including Kushano-Sasanian and Kidarite coins

(Smith 1906) collections were both published at the beginning of the 20th century (see §2.2 below), and the Peshawar Museum (Ali *et al.* 2004) more recently, all using more limited definitions of Kushan coins than this catalogue, reporting 414, about 317, and 637 coins respectively. The Calcutta collection, at least, has grown substantially since (Bindyabod 1923; Basu 1977; Mukherjee 1978; 1990). The only collection, unpublished, likely to be comparable in size to the Taxila Museum and the British Museum is the Uttar Pradesh State Museum in Lucknow which for a long period was the principal repository for hoards in northern India (Srivastava 1980).

However, the British Museum collection is not solely of interest because of its size, or its concentration of rare examples, but also because of its openness. The collection has been actively placed at the disposal of collectors, academics and interested students since the formation of the Department of Coins and Medals in 1861. This has been guided by a 'spirit of 250 years of free access to the Museum's collections' (Ghey 2011) which is probably responsible for the central role the collection has played in Kushan studies.

2 This publication as a response

Research does not occur in a vacuum; it is influenced by the world around us and responds to previous research. In that sense this publication is a response to those influences, especially to the British Museum collection, and to the study of Kushan numismatics and Kushan history.

2.1 Response to the British Museum collection

One of the simplest questions to answer is why there is a need to publish once more the British Museum's collection of Kushan coins. The collection was last published in 1886 by Percy Gardner (see Ch. 4) as the *Catalogue of Indian Coins in the British Museum: Greek and Scythic Kings of Bactria and India*. In that publication he listed 404 Kushan coins, representing issues from the period of Kujula Kadphises (*c.* AD 50–90) to Vasudeva I (*c.* AD 190–230) and a small number of Kushano-Sasanian issues. That is a fraction of the size of the current collection (see §1.3 above) and leaves the vast bulk unpublished.

Gardner's publication truncated the Kushan coins as it viewed them from a Greek perspective and stopped when Brahmi inscriptions began to supplant Bactrian ones (in Greek script), first as control marks under Kanishka II (Ch. 2 **Table 2.2**), and then for the names of kings under Vasudeva II (Ch. 2 §J.4). To Gardner this likely seemed a simple application of numismatic classification. What made a coin 'Scythic' was its use of Greek script, and so that meant drawing an arbitrary line half way through the Kushan dynasty. It is an example of the way catalogues are often constructed, which flows from an assumption that 'Greekness' is an appropriate categorical imperative. This is inherently Helleno-centric and Euro-centric, and illustrates how such presentations of sources are never value neutral. It is not fundamentally different to our decision to include most, but not all, Kidarite coinage (see Ch. 3 §O–Q), while excluding most, but not all (see Ch. 3 §Z.G–Z.I), of their Hunnic successors (contrast this with Vondrovec 2014).

Alexander Cunningham wrote a comprehensive account within a few years of the first British Museum catalogue, based on the criteria of the historical dynasty, and rendered much of Gardner's publication obsolete almost immediately (see §2.2 below). The most lasting impact of the way Gardner framed the coinage has been a tendency to distinguish the fourth to the seventh kings of the dynasty as 'great Kushans',

and to accord them a greater historical import than their successors, often denying that the latter had a royal status (Göbl 1984, 8, 17 and 38; Mukherjee 1988, 194, 254; Thaplyal 2014, 165). This position is largely unsupported by the evidence and our contrary position is best summarised in Chapter 2 (§K–N.1).

Though parts of the British Museum collection have been published since (see Ch. 4 for details) there has been no systematic attempt to republish the whole collection. The coins have been available in part over many years through the Museum's online cataloguing system, but that lacks the contextual information, the argument and justification of presentation, which are essential to properly understand the coinage as a primary source. For all of these reasons – the collection's singular size, historiographic importance and the substantive shifts in scholarship since its first publication – republishing, or for many coins publishing for the first time, the British Museum's holdings has been desirable for some time.

However, while the British Museum's collection is the largest repository of Kushan gold and the largest widely accessible collection in the world it is neither complete nor a representative sample of Kushan coinage. One of the central problems with employing museum collections is that they are often assembled from other collections. When the interests and opportunities of those collectors align, they can collectively distort the final collection. Full details are given in Chapter 4 but for simplicity's sake the bulk of the British Museum collection arrived in two periods, the first from 1835–1900 and the second from 1980–2000. In the first period, from 1835–1900, most of the coins were donations and bequests from collectors, usually associated with the British civil and military role in India, often with a classical European education. As collectors they favoured rare, good condition, aesthetically pleasing coins, and, as classicists, those with Greek script and which came closest to European tastes. As such the British Museum collection disproportionately represents the gold coinage issued under Huvishka (*c.* AD 151–90) due to its diverse range of designs (see Ch. 3 §E.3). Similar coincidence of interest ensured the second period of acquisitions consisted almost entirely of copper coins.

While this is a problem, it is not an insurmountable one. This publication draws on other collections and publications to supplement the examples in the British Museum. In this way every type and variety that is known can be illustrated.

2.2 Response to the study of Kushan coins

This type catalogue is constructed and framed by Chapters 2 and 3 in large part as a response to prior studies of Kushan coins. Kushan coins were first noticed in the 18th century and their relative importance in historical study increased as British and Russian political interests in Central Asia and north-west India expanded in the 1820s–1860s (Cribb 2007a; Chakrabarti 1988, 32–42: Singh 2004, 12–28).

2.2.1 The earliest catalogues of Kushan coins

Systematic study began with Alexander Cunningham's serialised publications on the coins of this area in the *Numismatic Chronicle* from 1868 to 1894, of which four of the later articles focused on what is today called Kushan numismatics (Cunningham 1888; 1889; 1892; 1893a; 1893b). Cunningham began that series of articles by asserting the centrality of numismatics for the study of history in the region:

> For the West, therefore, the coins are only aids to history; but for the East, from the want of written records, they are history itself (Cunningham 1868, 181; 1884, 45).

This is something of an exaggeration though numismatics is a very important source for Kushan studies. There are also inscriptions, documents and archaeological remains, and even some narrative histories or chronicles focusing on the empire (such as the Chinese sources, see Ch. 2 §4, §5 and §A.1 in particular). The role these play in supplementing the information from numismatics is explored in Chapter 2. However, the assumption of Cunningham that numismatics are the primary source for Kushan studies has had a lasting impact which will be explored below.

In his publications, Cunningham adopted a different approach to that used for the first British Museum catalogue (see §2.1 above), which has been widely followed since (excepting Göbl see §2.2.3), and defined the study of Kushan coins by the historical dynasty and their apparent successors.

In 1906 Vincent Smith published a catalogue of pre-Islamic coins held in the Indian Museum and the Asiatic Society of Bengal (Smith 1906), both located in Calcutta/Kolkata. It featured approximately 300 Kushan coins, and follows Cunningham's work, defining what is to be included amongst Kushan coins by who issued them. Smith was a perceptive and careful scholar whose interests ranged broadly across the material culture of South Asia in the 1st millennium. In the catalogue he comes very close to a modern understanding of the chronology of the Kushans, successfully identifies both Kanishka II and the existence of numerous subsequent kings or 'sundry chiefs' (*ibid.*, 88–9), and correctly attributes coinage to the Kidarites (*ibid.*, 64). His reputation has suffered badly in the intervening century, and he is often viewed as an archetype of colonial scholarship. In fact his Helleno-centric biases, prejudices, and ideas of manifest destiny are no more pronounced than those of his contemporaries, but as he wrote more broadly and his *Early History of India* (Smith 1904) was a standard textbook for decades (Bhattacharya 2009, 78–9; Jha 2004, 18), they are much more widely known. For example, in Smith's catalogue most photographic plates are dedicated to just a small section of the early coins (including the Kushans) on the grounds that they possess greater artistic merit which is read as 'directly proportioned to the amount of Hellenic influence' (Smith 1906, iv).

In 1914 a catalogue of the Lahore Museum was prepared (Whitehead 1914). It was a substantial improvement on the simple lists published a few decades earlier (Rodgers 1891 and 1895). Though clearly dependent on Smith for introductory remarks on the Kushans (Whitehead 1914, 171–9) and on Cunningham and Smith for attributions of coins to both Kanishka II and Vasudeva II, Whitehead's catalogue is framed in Gardner's Helleno-centric terms when it describes its remit as 'the Great Kushāns, down to and including Vasu Deva' (*ibid.*, iii), and accepts Cunningham's elevation of numismatics:

> Our knowledge of the Indo-Scythians, Indo-Parthians, and Kushāns is again almost entirely derived from the study of their coins … (*ibid.*, v).

A final point is in order. Though both Smith and Whitehead wrote catalogues of Indian collections, they did not do so in India. Smith had retired to Cheltenham six years before his catalogue was published (Pargiter 1920, 392), and Whitehead prepared his work in the Department of Coins and Medals at the British Museum, which subsequently purchased his collection. The powerful forces of the British imperial enterprise (which employed both Cunningham and Smith) created the circumstances that made the British Museum's remarkable collection possible and also influenced all the works which laid the foundation for the study of Kushan coins in the 20th century. That remains a difficult legacy and the question of whether it compromises the field as a whole will be deferred to the end of this introduction (see §3.4 below).

2.2.2 The mid-20th century

Between the First World War and the 1960s Kushan studies saw relatively few advances in numismatic understandings of the period. Several studies developed the basic grounding for the study of Kushano-Sasanian coins (Bataille 1928; Herzfeld 1930; Bivar 1956; Lukonin 1967) and the later successors of the Kushans, the Huns, received a seminal four-volume treatment (Göbl 1967). This period in Kushan studies, however, saw the development of contributions from other disciplines, particularly the excavations of Taxila (Marshall 1951) and Begram (Ghirshman 1946; Morris 2021), and the beginning of Soviet archaeology in Central Asia (for a survey of the excavated sites see Staviskii 1977, 243–56; 1986, 261–79). These placed at the disposal of Kushan studies for the first time archaeological context for many of the coins, and also led to the development of Russian language studies (Staviskii *et al.* 1968; Zeymal 1968), particularly the works of Rtveladze and Pidaev (1981) and Zeymal (1983), who compiled summaries of coin finds from Uzbekistan and Tajikistan respectively, information which only began to fully inform Kushan studies some decades later.

At the same time the collation of inscriptions in Kharoshthi (Konow 1929) and Brahmi (Lüders 1961), many of them dated, created a further impetus to the study of political chronology. Numismatic evidence can usually establish only relative sequence, the order in which the coins were struck, and absolute chronology depends on connecting coins to dated sources, which in Kushan studies has almost always meant inscriptions. It is in this period that these two groups of sources were brought into direct contact on a routine basis (van Lohuizen-de Leeuw 1949) and the outlines of the debate around the date of Kanishka formed (see §2.3.1 below), culminating in a conference in 1960, itself of interest because of the participation of Robert Göbl (Basham 1968).

2.2.3 *Münzprägung der Kušānreiches* and *Ancient and Classical World*

In 1984 Robert Göbl published probably the most important study of Kushan coins subsequent to that of Alexander Cunningham (see Jongeward 2020 for a personal view of Göbl's approach to the Kushans). His *System und Chronologie der Münzprägung der Kušānreiches* (1984) contains the largest group of Kushan coins ever published, listing approximately 8000 coins representing 38 public collections, in addition to private material and examples from the trade. Its classification of Kushan coins was a huge advance on that of Cunningham and in broad outlines very close to that employed in this catalogue.

Göbl was a scholar of remarkable energy, responsible for a series of ground-breaking works before coming to Kushan studies, and his interest in the methodology of numismatics was so central to his work (Göbl 1978) that it is often referred to as the 'Vienna School'. In broad strokes this approach emphasises the utility of numismatics over most other types of evidence (as did Cunningham, see §2.2.1 above), employs comprehensive cataloguing techniques and has a particular focus on reconstructing the activity within the mint: what Göbl called the 'Rekonstruktion der kušānischen Emissionen' (Göbl 1984, 8) or the 'Rekonstruktion von Prägesystemen' (*ibid.*, 11). This type of highly technical numismatics was increasingly out of fashion amongst English-speaking numismatics when his work was published in the 1980s (see §2.2.4 below) and this sometimes found expression in a dismissive attitude to Göbl's work and its perceived narrow focus (Burnett 1983), often mirrored by an aggressively critical response from Göbl towards a numismatic community he felt had largely abandoned rigorous methods and lacked technical skill (for examples see Göbl 1984, 8, fn. 5; 1993a, 13–18; 1999, 151). In particular he was dismissive of his contemporary, Michael Mitchiner, and the equally influential *Oriental Coins and their Values*, vol. 2, *Ancient and Classical World* (1978) which will be discussed below (Göbl 1984, 8, fn. 6).

The first, and most notable feature of *System und Chronologie der Münzprägung der Kušānreiches* is that it defined Kushan numismatics very differently from its predecessors and successors. Since Cunningham the tendency has been to define the core of the coinage as that issued by the historical dynasty modern historians call the Kushans. In contrast Göbl instead sought to define it by the numismatic material itself (following the 'Vienna School's' tendency to give primacy to the coins over other historical considerations). The core material he defined by the bimetallic (gold and copper) system with its distinctive iconography, first established under Wima Kadphises (Ch. 3 §C.1). This meant the inclusion of those Kushano-Sasanian and Kidarite coinages which continued that system, but the exclusion of the first two Kushan emperors, whose coinage was essentially a continuation of Bactrian Greek, Indo-Scythian and Indo-Parthian practice (Catalogue Series A and B).

Göbl (1984) sought to reconstruct the system of Kushan minting, and in order to do that his work combined several different numismatic functions – a comprehensive corpus, a type catalogue and a die catalogue. These three elements require closer examination because they involve very different principles which often fight against each other. Though Göbl's work made this publication possible, understanding the contradictions in his method will explain why a different approach has been taken here.

A corpus is simply the publication of a group of coins associated by some feature, for example that they are held in the same collection, come from the same hoard, or relate to the same historic moment, though that simple description underplays its importance. For example, one particular type of corpus that has proven invaluable is the sylloge. A sylloge gives minimal lists with only basic ordering for a collection, but usually accompanied by an image of every coin. There are currently ongoing sylloge series for Greek, Parthian, Sasanian coins, and coins of the British Isles, which place at the disposal of numismatists working in those areas a vast body of material. By contrast most Kushan coins in public collections remain unpublished and most North Indian and some European collections are still not easily accessible to scholars.

In contrast to a corpus, a type catalogue is a specific selection which reduces the vast bulk of coinage to a set of representative examples, usually the best preserved. The sample is selected by grouping coins into 'class', 'type', or 'variety', often envisaged as a hierarchy, contained within the wider concept of a 'series'. Numismatics has never developed strict formal definitions for any of these terms so they tend to be employed idiosyncratically in different publications but the principles are similar. We might, for example, define all of the gold coins of Kanishka I in which his sword projects to the right as a single class, and then within that divide the coins into types based on the deity which appears on the reverse. Then if you have two slightly different versions of the same deity you could subdivide these into varieties. In which case a single coin can stand in for the dozens, or perhaps hundreds, of actual coins, whose mass-produced nature might overwhelm the reader in a sylloge format. The type catalogue is probably the most important tool numismatists have to render large bodies of data tractable for historians, archaeologists and collectors (Burnett 2011a, 8). However, type catalogues do have limitations, particularly in that they render rare types in an equivalent manner to common types. For example, in the current publication the gold coinage issued under Huvishka (*c.* AD 150–90) occupies far greater space than the coinage issued under the much later Shaka (early 4th century AD), because the former employed a vast range of types with changes in obverse and reverse while the latter uses essentially one type through the reign with only minor varieties indicated by control marks, yet the latter coinage was in fact much larger (Ch. 3 §L.1).

An alternative organisation, which better reflects the scale of coinages is provided by the die corpus. Ancient coins are mass produced, in the case of Kushan coins by striking between two engraved dies (alternative ancient technologies included punch-marking and casting). Those dies were handmade and the forces involved ensured very limited life spans. As a result, it is possible by examining surviving coins to establish if the same tools were used. Die studies have formed an important element of research on Kushan coins since Göbl's work (see particularly Cribb 1993; Cribb 1999–2000; Bracey 2009) and have informed the current publication at various points.

One of the issues in *System und Chronologie der Münzprägung der Kušānreiches* is that it attempts to render all of these functions simultaneously, despite each having fundamentally different principles of organisation. The result is to render the catalogue a sort of palimpsest of different studies, and thus very difficult to use. The current publication therefore eschews this approach. Though there is a listing of the British Museum collection within the catalogue, which gives the readers a sense of volume (albeit one shaped by collecting practice, see §1.3 above and Ch. 4), this publication is not a sylloge. Nor, despite Chapter 3 depending in part on die studies, is this a die corpus. Where illustration comes very close to showing dies (for example with the Buddha coins of Kanishka I) it is because the types and varieties come very close to following the production of dies. Instead as comprehensive a type catalogue as is currently possible for Kushan coinage has been sought, ensuring a single organising principle shapes the whole.

In 1978 Michael Mitchiner published a very different numismatic account, *Oriental Coins and their Values*, vol. 2, *Ancient and Classical World*. Where Göbl's *System und Chronologie der Münzprägung der Kušānreiches* sought to provide a comprehensive account of Kushan coinage, Mitchiner instead situated them within an illustrative guide. His book is a vast undertaking, which begins with the origins of all three Asian coinage traditions (Mitchiner 1978, 15–16): die striking in Lydia (*ibid.*, 27), casting in China (*ibid.*, 669), and punch-marking in Central/South Asia (*ibid.*, 499). From there it examines a variety of series deriving from those traditions:

> The end result is the present book in which a survey of the Ancient Orient and its coinage is presented through the medium of over five and half thousand coins, all in the possession of private collectors, or dealers (*ibid.*, 14).

The Kushan coinage (AD 385–498) is treated at length, incorporating both the Kidarites and the Alchons, but not the Kushano-Sasanians (which is covered with Iranian material). Where Göbl treats the Kushans as belonging to an Iranian sphere, Mitchiner treats them as essentially Indian, placing them at the beginning of part 2, after the Western Satraps (rulers of Gujarat and the surrounding region), who end part 1, and before several sections treating Indian coinage from the punch-marked coinage to the Guptas.

Göbl criticised Mitchiner (1978) for a lack of rigorous method, but it is more accurate to say that the book had radically different objectives. It is for a start not a type catalogue, a corpus, a die study or any of the types of numismatic presentation so far discussed. In many cases multiple examples of the same type are illustrated, while in others many distinct types are excluded. For example, there are 202 examples of Vasudeva I's quite homogenous copper coinage (Mitchiner 1978, 3399–500) as against just 12 examples of Huvishka's iconographically diverse gold coinage (Mitchiner 1978, 3, 190–201). This is because Mitchiner's purpose is to illustrate: the development of the coinage traditions; the history of the ancient world; and the value of private collecting. History is meant here as political history and chronology, which are the subjects of the short survey sections preceding each section.

Ancient and Classical World remains phenomenally successful because it suited its tools to its objective so well. By providing an illustrative guide, rather than a comprehensive

one, it was able to cover a huge range of material – in sufficient detail for most collectors or historians. It is not used as a departure point for this publication because it is more historical than numismatic, and as such there is nothing to build on (the idea of numismatics as a hierarchical discipline will be discussed below in §2.2.4). Mitchiner later revisited the format to illustrate the development of trade, beginning with pre-numismatic material and running up to the first two Kushan emperors (Mitchiner 2004, 591–607), reflecting shifts in scholarly interest in the 25 years between.

This publication is more numismatically focused than that of Göbl, in that it is based on a careful application of methods, including die studies, both to produce a type catalogue organised by the production system, and to demonstrate the evidentiary basis for that. At the same time it is less numismatically focused in that it accepts the need illustrated by Mitchiner to frame the data in relation to real historical questions – which, as in *Ancient and Classical World*, are here primarily of dynastic history.

2.2.4 Numismatics post-1984

Göbl's monumental work of 1984 is the principal point of departure for this publication, but it also represented an approach that was through the 1980s and 1990s rejected by many numismatists in the English-speaking world. This was driven in part by the impression that numismatics had nothing to offer, and that the discipline as represented by the 'Vienna School' was concerned only with lists of little historical relevance. A view some museum professionals still fear is the perception of numismatics:

> I think numismatic institutions can no longer afford to focus solely on numismatics (the objects themselves). We have to change our focus at least in part. To reach a wider audience we have to show the role the objects in our collections played and still play in society. We have to show that the objects in our care are still full of meaning (Schollaardt 2011, 14).

This critique was already strongly felt by the early 1980s and led to significant changes. There was a shift away from the study of the production of coinage, which collections are well suited for, to the study of the use of coins, which takes more advantage of archaeology (Haselgrove and Krmnicek 2012, 237; Kelleher 2011), and at the same time a shift to the study of money (Cribb 2006, 513–15; Bracey 2011b). Increasingly numismatics has come to be framed less as the study of coins and more as the study of the physical representations of money, complementary to economics which studies theories of money. This is apparent in descriptions of changes in the British Museum's Coins and Medals Department in that period:

> The changing emphasis from production to use of coinage is also part of the larger, continuing shift from coins to money. The Museum's Director, David Wilson, encouraged the study of paper money by establishing a post responsible for the area and a different approach also became evident in the department with exhibitions such as *Money: from cowrie shells to credit cards* in 1986 … taxonomic work has continued and should continue, but the shift to money was the key to the department's success … (Burnett 2011a, 9).

Recognising that this is a major shift in numismatic studies it is necessary to explain why this type catalogue primarily takes its departure from a reading of *System und Chronologie der Münzprägung des Kušānreiches* (Göbl 1984) and the 'Vienna School', focusing primarily on production, on political history, and in a sense on the coins themselves rather than money or archaeology. This is not a rejection of recent intellectual trends; those involved in the current publication have pioneered in the monetary shift (Cribb 1986; 1997b; 2007a), the application of the linguistic turn to numismatics (Cribb 2005b; 2006; 2007c; 2009), comparative studies (Adrych *et al.* 2017), the extension of paranumismatic studies (Bracey 2019), the publication and understanding of the archaeological context of coins (Cribb and Potts 1996; Cribb 2002; 2009; Khan 2007a; 2008a; 2009a; 2010a; 2014; Khan and Cribb 2012), and cross-disciplinary work with economics (Wagoner and Tandon 2018) and art history (Cribb 1984a; 1985a; 2016a; 2018c). Instead it reflects an understanding of the nature of numismatic study, which is contrary to a widely held understanding of how historical knowledge develops.

A useful way to frame the structure of numismatic research is in terms of Basil Bernstein's sociology of knowledge (Bernstein 1999) which has been deeply influential (Power *et al.* 2001; Hordern 2017). Bernstein offered a division of academic knowledge (which he calls vertical discourse to distinguish it from everyday common sense) into two basic processes, one hierarchical and the other specialised:

> a vertical discourse takes the form of a coherent, explicit, and systematically principled structure, hierarchically organised, as in the sciences, or it takes the form of a series of specialised languages with specialised modes of interrogation and specialised criteria for the production and circulation of texts, as in the social sciences and humanities (Bernstein 1999, 159).

Importantly Bernstein connected these processes with the differences between the sciences and the humanities, a correspondence which maps well onto the general assumptions made by academics. In hierarchical disciplines you must answer certain questions before you can ask others while in specialised disciplines you may ask questions in an order of your choice. Numismatic research crosses these categories as its process is largely hierarchical, but its breadth also creates specialised modes of interrogation. For example, it would be a mistake to discuss the religious meaning of gods on Kushan coins without first establishing an understanding of the use of divine images within the production system, which can only be constructed on the basis of a classification system for the surviving coins. None of these steps would benefit the study of coin finds in Britain which depends on its own set of specialised interrogations, but also involves a different set of hierarchic steps.

For the study of numismatics Bernstein's categorisation shows that, as a discipline, it adheres more closely to his description of a hierarchically organised structure of knowledge, than a specialised one, but its operation within the humanities also sees it creating its own specialised criteria. In this respect it is unusual in the humanities and different from the wider historical discourse it informs.

In this publication a hierarchical process is laid out, from classification to die study to production system to type catalogue. In order to perform a die study it is first necessary to engage in at least a basic level of classification at the level

Figure 1.3 Silver drachm of the Kushano-Sasanian king Varahran (image courtesy of Heinz Bons)

of types or denominations, in order to establish which coins might in fact share dies in common. A type study cannot usually provide information about minting structure because its criteria for classification is essentially iconographic. A die study can provide information about the production structure because its criteria are the tools used to make coins. It is necessary therefore to use a die corpus in order to produce a type catalogue organised by production. This publication is possible because of previous die studies on Kushan coins (Göbl 1984; Cribb 1993; Cribb 1998b; Cribb 1999–2000; Bracey 2009) but the particular step it takes in this hierarchical process is a type catalogue.

Bernstein's suggestion is that in hierarchically structured knowledge some questions cannot be answered until investigations of logically prior questions have been undertaken. For example, in numismatics, without a classification of type based on production it is not possible to categorise finds in the manner which has proven so powerful in recent years in UK numismatics (Kelleher 2011, 23). Utilising such an understanding of production, represented through type catalogues, a study of finds starts to inform us about the circulation of coins based on inferences about the gap between production and deposition. In numismatics in order to ask certain questions you must first answer others. In the study of British coins much of the work has already been done on classification and production systems, so the analysis of finds can follow, but in Kushan numismatics the groundwork is still being done and the data on coin circulation is still waiting for the results of these steps to be available.

For that reason Kushan numismatics cannot be pursued along the lines of enquiry which have dominated recent scholarship in other numismatic fields – circulation, monetary practice, social import, trade or archaeology – without first filling the gap felt for a type catalogue, for an understanding of production, which of course depends in part on the political chronology. In numismatics new data is built on old data, not alongside it, and so it is necessary to place that foundation on a firm relation between the constructed catalogue and the evidence. We share the frustration that these are not the questions some historians might want to ask; there are other questions we would like to ask, but we cannot ask those questions without first answering the basic questions:

> What all numismatists have in common is a curiosity about coins and what coins have to tell us about themselves and the time when they were issued. The complexity of the questions is incremental and the more profound questions of today rely on the answers of the simpler questions which have to be asked first (Cribb 2006, 503).

The process does not end with the compilation of a type catalogue, as new types keep appearing, such as a silver drachm of the Kushano-Sasanian king Varahran (3.5g, 26mm), with the same reverse design as the drachms of Peroz I (T.S1-i) and Hormizd I (U.S1-i and U.S2-i), but with the Pahlavi inscriptions: obverse: *mzdysn bgy wrhr'n RBA kwš'n MLKA* (Mazda-worshipping Varahran great king of Kushan); reverse: (on right) *bwrz'wndy yzdty* (the high god); (above) *bhly* (Balkh); (on left) *wrhr'n RBA kwš'n*; (below) *MLKA* (Varahran the great king of Kushan). The coin was shown to us too late to be incorporated into the catalogue, but adds another data point (**Fig. 1.3**). Undoubtedly more new discoveries will follow. The mint name on this coin reinforces the attribution of the Bactrian copper coinage to the Balkh mint, as it has the same obverse portrait type and dot control mark as Y.C1-i, obverse F. This coin also raises new questions about the nature of the earlier drachms, which looked like special issues, but could be part of a small but routine part of the coinage. Its issue at Balkh also raises again the question of the location of the mint striking the earlier silver coins inscribed with the city names of Merv and Herat, but with a control mark of the Balkh mint (Ch. 3 §U.4).

> … all these questions cannot be answered once, but have to be repeatedly addressed to the material at each stage of the investigation and, now that the catalogue is complete and the introductory essays written, they will surely have to be asked again (Cribb 1999b, 91).

2.2.5 Alternative numismatic approaches

The previous section offered arguments that there was a need for a comprehensive dynastic history of the Kushans, that a type catalogue was needed to advance the study of Kushan coins, and that a type catalogue based on public collections was best suited to reconstructing dynastic history. However, doing this makes possible other approaches, alternative ways of presenting the coins and types of history. Some of the alternative approaches this publication makes possible will be highlighted here. We hope they will be taken up in the near future.

There is nothing intrinsic to numismatic evidence which requires that historical inferences be restricted to questions of dynastic succession, chronology, administrative control, royal image, religious patronage or policy, or inter-state relations. As suggested above (§2.2.4) it would be more in

keeping with recent numismatic trends to frame the coins as evidence for economic history. Most coins are made to serve economic functions, as payments, stores of wealth, physical embodiments of units of account, medium of exchange, or facilitators for taxation. Much of the non-numismatic evidence from the Kushan period has more to say about money that it does about kings, particularly the accounting and fines in the Bactrian documents (see Ch. 3, introduction). Even within a dynastic history it is necessary to admit that numismatic traces in neighbouring regions such as the Gangetic valley, Choresmia or the Tarim Basin, often owe a great deal more to trade than they do to conquest (see Ch. 2 §D.1).

However, as already suggested, numismatic presentations are constructions. If Chapter 2 had been framed as economic history it would have necessitated discussing deposition of coins in detail in Chapter 3, because where coins are found is a much better guide to their use than how they were made. To support that would require a corpus, rather than a type catalogue, of the finds contextualised either by being part of hoards or found in an archaeological context. This would be straightforward with listings of Uzbekistan (Rtveladze and Pidaev 1981) and Tajikistan finds (Zeymal 1983; Dovudi 2009), as such data has been published in some detail, but hoards from North India have received only cursory examination until those published by Basu Majumdar and Ahamad (2010) and Sharma (2012). It would also get our questions in the wrong order. Publications of finds and hoards are often hard to compare precisely because they use different classification systems. This publication seeks to establish such a typology, so that precisely that kind of study of archaeological data can be interpreted as economic data. As already suggested: numismatics is hierarchical (§2.2.4) and sometimes you need to answer one question to ask another.

There is no binary choice between politics/production and economics/deposition. Numismatic data can be utilised by historians for a wide variety of purposes. To give just one historical example, it is very interesting to examine the way the coins present, or do not present, gender. This is a popular line of historical enquiry which until recently numismatists have ignored. The first workshop on the subject, organised by Stefan Krmnicek and Annetta Alexandridis, *Gender Numismatics: Fluid Identities and Ancient Coinage* was held at Tübingen in November 2018.

It would be a productive approach for the Kushan period, as not only was the most prominent Buddhist in contemporary inscriptions a woman, Buddhamitra (discussed only very briefly here, Ch. 2 §D.5.1 and §D.6.2), but a dramatic shift in the relative importance of male and female monastic orders happened in this period (Falk 1980). It is not simply that the dynastic history in Chapter 2 has something to offer those studies in terms of chronology, though it does, but that gender as a focus can be a useful way to understand the coinage.

Once Kushan coins are viewed through such a lens it becomes very obvious that while there are feminine depictions (goddesses such as Nana or Ardochsho) there are no images of actual women: that is, no historical woman is featured on the coins, despite several subordinates who are not kings being named, and despite women being represented on the coin series that preceded and followed the Kushans. For example, Bactrian Greek coins are known bearing the name of Laodice, Indo-Greek coins of Calliope, and Agathocleia (Bopearachchi 1991, 209–10, 251–3 and 325), Indo-Scythian coins of Machene (Senior 2001, 2, type 4.1) and on the Gupta coinage, Kumaradevi, wife of Chandragupta I, is featured in a commemorative issue (Allan 1914, 8–11) (**Fig. 1.4**). Matrilineal descent also featured in the coin inscriptions of the Kushan kings' contemporaries, the Satavahanas (Rapson 1908, clxxxix–cxc). In fact, the moment you view the Kushans through the prism of gender, it becomes apparent how odd it is that we do not know the name of a single female member of the royal family.

To ask such a set of questions would require a wider survey of coinage than simply that of the Kushans, but rather an approach similar in breadth to that of Mitchiner (2004). This publication makes such an approach more practical by establishing a comprehensive type catalogue for the Kushans to match those available for Bactrian and Indo-Greek coins (Bopearachchi 1991), Indo-Scythian and Indo-Parthian (Senior 2001; Fröhlich 2008), Western Satrap (Jha and Rajgor 1992; Fishman 2013a; 2013b) and Gupta coins (Allan 1914; Altekar 1957; Kumar 2017). We hope that others will use the evidence presented to ask such historical questions. They are as necessary, important and valuable as the dynastic history offered here.

2.3 Response to wider Kushan studies

As already noted, Kushan studies was initially conceived as depending almost exclusively on numismatics (see §2.2.1 above), and the work of Robert Göbl began from an assumption of the primacy of numismatic data (see §2.2.3 above). This has often had the effect of encouraging an assumption that numismatics was the proper business of Kushan studies. The current authors argue that in fact Kushan studies necessitates a broad range of sources. Numismatic evidence is important but it has no privileged place and our histories must depend on bringing it into conversation with other sources. This approach informs Chapter 2 in particular, that any new publication of numismatic data must be put to a historical use, but it also necessitates putting the current publication in the context of wider Kushan studies. This can be thought of in several parts: as a response to the historiography on political history in Kushan studies; as a rejection of a privileged status for Kushan studies; as a response to wider Kushan studies; and as a response to new evidence.

2.3.1 A response to political history

As already noted, Chapter 2 is presented as a dynastic history of the Kushan empire, and of the Kushano-Sasanian and Kidarite Hun polities which appear to have inherited some of its minting facilities. It is not a potted history of the period, which would necessitate a much broader range of subjects (see §2.2.5 above and §3.4 below). Nor is it simply a description of what the coins tell us about the period, which is the direction in which Göbl's account leant. That we have chosen to frame the coins through a historical narrative

reflects the recent shift in numismatics not to isolate the coins from wider research questions (see §2.2.4 above). The decision to focus on dynastic history reflects the sources themselves. Coins intrinsically preserve information about their manufacture, and the system which mass produced them, and that system of manufacture is fundamentally political (even if it serves economic needs). The process of classifying them helps reveal that system, and classification is one of the processes that happens through collections. So the best numismatic evidence available, given the paucity of information about finds, lends itself particularly well to questions of political history. Indeed, it is questions of political or dynastic history which Kushan coins have most frequently been pressed to answer (Rosenfield 1967; Mukherjee 1967; 1988).

The earliest histories (see particularly Smith 1904) of course framed their questions in terms of dynastic history, politics and 'great men'. That was not only the discourse that was common in historical studies at the time, but one which would seem self-evident to men frequently trained as colonial officials (see §2.2.1 above). Those questions have remained the dominant mode of engaging at least with coins in the Kushan period, to the extent that scholars who engaged with other aspects of Kushan studies would often label their work distinctly, for example as 'middle Indian Buddhism' or 'Gandharan art'. Kushan studies as a concept has never transcended its political origins to denote simply a geographic and chronological label within which a variety of historical subjects might be tackled, in the way for example that 'Roman history' has (notable attempts to do so include Staviskii 1986; Mani 1987). As a result, an odd discrepancy has arisen in general histories of the period. For colonial era historians the Kushans were a major topic of enquiry: as foreign conquerors associated with a classical heritage they mirrored British perceptions of their own role in India. In the late 20th century, historians have rightly jettisoned such a narrow focus on political history, and have at least tried to eliminate some of the Euro-centric thinking exhibited by earlier writers. So, in some cases the Kushan empire is given an unwarranted role in historical events (discussed in the next section), while larger global histories, framed in terms of trade or other issues (cf. Beckwith 2009), almost entirely ignore it.

The solution to this historiographic problem is historical evidence. Laying out the evidence clearly for when and where the Kushans ruled, and the potential implications of that, places it at the disposal of those interested in 'world history'. It also makes clear where the limits of Kushan influence were.

A critical part of this is political chronology. Throughout the mid-20th century, discussions of the Kushan empire, including by non-specialists, were dominated by the 'date of Kanishka' problem. It was believed by many historians that the chronology of the Kushan empire, specifically the founding of an era by the fourth king, was a lynchpin on which much of the rest of the early 1st millennium chronology hung:

> … numerous questions of Oriental history and archaeology depend on the correct solution of this problem. Of these the chronology of the Gandhāra school of art, of the transmission of the Buddhist religion and scriptures to central and eastern Asia, and the lately reopened dating questions of the Western Satraps in Gujarat are but a few. In its essence, the problem is one of establishing … the commencement of the chronological system known as the Kaniṣka era (Bivar 1963, 498).

Figure 1.4 Depictions of historical women on coins (from top to bottom): Laodice with the Bactrian king Heliocles (BM IOC.45); Agathocleia with the Indo-Greek king Strato (BM 1956,0710.30); Calliope with the Indo-Greek king Hermaeus (BM 1946,1004.2328); Kumaradevi with her husband Chandragupta I (BM 1910,0403.1)

In practice it has become evident that the real problem was to resolve not one date, but the relative and absolute dates of all the kings, and the attributions of inscriptions and coins. To a very large degree that problem has been solved partly through new evidence and partly through scholarship over the last half century. Today we know with certainty how many kings ruled, in what order, which coins they issued, how many eras were employed in inscriptions, and when those eras began (**Table 1.2**). There is still, of course, some uncertainty but it is of a very different order to that

Kushan kings		Kushanshah rulers		Kidarite kings	
Kujula Kadphises	*c.* 50–90				
Wima Takto	*c.* 90–113				
Wima Kadphises	*c.* 113–27				
Kanishka I	*c.* 127–51				
Huvishka	*c.* 151–90				
Vasudeva I	*c.* 190–230				
Kanishka II	*c.* 230–46	Ardashir I	*c.* 230–5		
		Ardashir II	*c.* 235–45		
Vasishka	*c.* 246–67	Peroz I	*c.* 245–70		
Kanishka III	*c.* 267–72	Hormizd I	*c.* 270–300		
Vasudeva II	*c.* 267–97				
[usurper Meśra]	*c.* 297–300	Hormizd II	*c.* 300–3		
Mahi	*c.* 297–302				
Shaka	*c.* 302–42	Peroz II	*c.* 303–30		
Kipunadha	*c.* 342–52	Varahran	*c.* 330–59	Kirada	*c.* 345–50
				Peroz	*c.* 350–5
				Kidara	*c.* 355–85
				Orōlano	*c.* 385–400
				Pidoko	*c.* 400–30
				Tobazino	*c.* 430–5
				Ōkilano	*c.* 435–50
				Ōzmano?	*c.* 450–67

Table 1.2 The chronology of the Kushans, Kushanshahs and Kidarites

faced by a scholar 50 years ago. Today any particular date might have a margin of error of five or ten years: in the 20th century there was a gap of 200 years between chronologies proposed (Basham 1968; Zeymal 1968).

Presenting this solution is one of the main purposes of Chapter 2. Rather than rehash the debate around the date of Kanishka I (Bracey 2017; Cribb 2018a), it presents the data for each individual king. Each section presents what is known and what remains uncertain in each case. The cumulative effect of all of these independent points is that the other 12 Kushan monarchs fix Kanishka I within quite tight bounds. He came to the throne about AD 127, initiated an era at about the same date (the two may not exactly coincide), and ruled for approximately 25 years. Future discoveries may refine those estimates, perhaps shift them a few years forwards, or backwards, but they will not fundamentally alter them.

Until recently, advances in Kushan studies have been the focus of specialist articles covering a single problem, debate or piece of evidence. It is thus unsurprising that much confusion still rages when scholars from other fields attempt to integrate Kushan studies in their research. Not only does this publication place those advances in a single place, it attempts to qualify the degree of certainty that should be attached to each aspect and how they work in a unified account.

We have not only laid out some fairly well-defined limits on Kushan power by juxtaposing them against their contemporaries, but shown both the strength and limitation of numismatic evidence to establish chronological boundaries, and how that evidence can be used in conjunction with inscriptions. A basic observation, which seems obvious once stated, is that the presence of a coin is essentially economic, while the presence of a mint is essentially political. The Kushan rule over Bactria, the Kabul valley, Gandhara, northern Punjab, Kashmir and the Mathura region are firmly established in the 2nd century by the location of their mints. The rule of their contemporaries can be established by rival minting operations, and thus it can be established that the Kushans did not rule over those areas. For example, the presence of coins, in huge numbers, in the Gangetic valley, is undercut as evidence of Kushan rule by the fact, established here, that those coins were made a thousand miles away in Begram in Afghanistan (see Ch. 2, §D.1.1).

2.3.1.1 Possible, plausible, probable: the language of historical probability

> No very profound knowledge of coins and inscriptions is needed in order to realize that the assertions they make are by no means uniformly trustworthy … (Collingwood 1946, 260).

Collingwood made his remark in connection with a review of the development of critical history in the 19th and early 20th century. His point was that our understanding of the past depends upon arguments and inferences. For example, it is a fact that there is a gold coin weighing slightly over 7g with the inscription BOΔΔO in the British Museum. Like most absolutely certain facts it is really a statement about the present. However, the statement that the coin was made in the final phase of production under Kanishka I at the Kushan mint in Balkh, probably for some specific purpose,

is an inference (see Ch. 2 §D.5.1 and Ch. 3 §D.5). Like all inferences it is open to a certain amount of doubt.

As already stated, the objective of this publication is to establish an evidentiary basis for Kushan studies, specifically for the use of coins. That objective requires more than just a catalogue of the available data. It requires that we explain how inferences are made and respect the degrees of doubt and language of probability which underpins inferences. In Chapter 2 a serious attempt has been made to distinguish between those inferences which are merely possibilities, and those which seem plausible, or are by far the most probable interpretation of the evidence. Chapter 3 attempts to illustrate as clearly as possible the numismatic method that underpins our inferences. This can be thought of as a continuum from speculation to near certainty – possible, plausible, probable. No strict language has been enforced here and readers will encounter a variety of terms to indicate how likely a particular inference is. Hopefully the result is clear – to distinguish areas of serious doubt from those which can be depended on.

2.3.2 As a response to Kushan exceptionalism

> In Indian historical and archaeological studies the Kushana phase has been given somewhat extraordinary significance because everything related to the early centuries AD has been relegated to the Kushana phase. This has caused harm to the proper historical understanding of this phase, and one hopes that with more ground research the situation will carry more historical meaning than it does today (editorial comment to Chakravarti 2014, 35).

Chapter 2 is constructed in a particular way, that reflects our understanding of the evidentiary basis for Kushan studies. The implicit message is that the Kushans are not as important as they are often assumed to be. By that it is meant that no evidence survives indicating they were more powerful than their contemporaries, such as the Western Satraps, Satavahanas or Maghas. Nor did they necessarily have a more profound impact on art, or religion, than other dynasties who are much less well studied. For example, the assertion of the Kushans', particularly Kanishka I's, role in the promotion and spread of Buddhism (Lam 2013, 439, 444) is largely driven by assumptions, rather than the evidence which is limited to 'pious legends' (Nattier 2008, 74, fn. 171).

The Kushans are important: they ruled large parts of South and Central Asia for more than three centuries. However, the tendency to accord the Kushans (alongside the Mauryans and Guptas) a pre-eminent, or exceptional, role represents a failure to distinguish the preponderance of secondary literature on the Kushans from the primary source material, which is much less exceptional. Undoubtedly this, and elements of colonial historiography, are responsible for the assumption of Kushan hegemony over most or all of northern and western India, which continues to be asserted today (Singh 2008, 378–9). As discussed extensively in this publication (see particularly Ch. 2 §D), notions of Kushan hegemony lack any meaningful evidentiary basis, and while the range of possible political relationships is difficult to determine from scant sources, it is undoubtedly the case that the empire was always smaller than is widely assumed (Bracey 2020).

Another area in which Kushan studies is given a false primacy is the study of Sanskrit. In the early 1st millennium AD the vernacular Prakrits first employed in Brahmi inscriptions by Ashoka were gradually displaced by Sanskrit. Epigraphers have tended to see this process as beginning in the Kushan-ruled city of Mathura, and in some cases attributed the impetus to the Kushan court (Pollock 2009, 90, 169, 499 and 513). Yet this reconstruction is almost certainly erroneous; the evidence itself indicates that Bactrian was favoured by the Kushan state for administrative purposes, and that the employment of Sanskrit elements to 'elevate' formal private records was an established practice before Kushan rule reached Mathura (Damsteegt 1978). Often it seems the desire to accord Mathura primacy, over for example the Junagadh inscription, has driven the interpretation of evidence rather than responding to that evidence (for an example see Salomon 1998, 86–90, who misrepresents scholarship on the dating of the inscriptions), or has encouraged a naïve positivism in associating writers with a particular king (see Ch. 2 §D.5.1).

None of this is to suggest that Kushan studies do not have valuable evidence to contribute towards such wider debates, but that it is just one element of a much wider and more complex tapestry of South/Central Asian studies. For example, the question of whether India passed through a 'feudal' period in the late 1st millennium, associated particularly with the collapse of a market economy and the development of strict caste rules which tied people to land and professions in a hereditary manner, has been a major element of Indian historiography since the 1950s. One proponent, R.S. Sharma (2001, 119–62), sought to argue that this process led to a demonetisation by collating data from public collections. A similar approach using hoard data had already been undertaken independently (Deyell 1990, 35–6). Respectively, both showed precipitous drops in coinage, the first after the Gupta period (post AD 500) and the second in the Gupta period itself (AD 300 to 500), i.e. directly after the end of Kushan rule. Leaving aside the dubious conflation of coinage with money, probably unjustified, both of these arguments confuse a secondary source, coins recorded, with a primary source, coins extant (Bhandare 2015, 185–95). The current publication cannot solve the problem, but it can supply one set of datapoints to highlight the difficulties. Contrast the coins recorded in the British Museum collection in Chapter 4 with the table of die use in Chapter 3 (§L.1). The collection of gold coins is dominated by the coinage issued under Huvishka (AD 150–90) but we know, because die counts are a reliable proxy for production, that Huvishka's coinage was trivial, orders of magnitude smaller than that of kings in the 4th century. In fact, since it is possible Huvishka's mints replaced dies more frequently than was normal in ancient coinage, at some stages (Ch. 2 §E.1), it is possible the die count is inflated and the production of coins was even smaller than it indicates.

The Kushan period matters, but it is no more important than any other. Likewise no part of the Kushan period is more significant than any other part – a fallacy encapsulated in the term 'Great Kushans' to denote the period from Kanishka I to Vasudeva I. This distinction was first made

implicitly by Cunningham (1889), and later explicitly (1893a, 112 and 1893b, 184):

> Class C. – Coins of the Great Yue-chi, or Kushâns, in Kabul and N.W. India, from B.C. 16 to A.D. 200.
>
> Class D. – Coins of the Later Kushâns in Kabul and N.W. India, after A.D. 200. (Cunningham 1889, 301).

There is also a problematic tendency to attribute sources which mention a king to the first king of that name, such as Kanishka I (see Ch. 2 §D.2 and §D.5.1) or Vasudeva I (cf. Falk and Sims-Williams 2017; Ch. 2 §F.3, §J.3 and §J.5), rather than one of their successors.

These points are raised with full understanding that the decision to organise the evidence as a type catalogue (see §2.2.3 above) superficially gives undue weight to the coinage of Huvishka, as a result of the exceptional variety of designs employed in that period and much more comprehensive publication of his extant coinage. As the objective of this publication is both to present evidence and contextualise it, this caveat is necessary before discussing the wider historical debates the publication might inform but does not attempt to discuss in detail.

2.3.3 Response to Kushan studies

Kushan studies have grown considerably since Cunningham first rediscovered the Kushans in 1845, by connecting their coins with references to kings in the *Rājataraṅgiṇī* and the Guishuang ruler in the *Hou Han Shu* (Cunningham 1845; Cribb 2007a, 206–7). In 1905 Alfred Foucher published the first volume of *L'art gréco-bouddhique du Gandhara* and gave shape to what almost all of his successors have referred to as Gandharan art. Gandharan art is essentially defined by its depiction of the historical Buddha in human form. Though a Helleno-centric viewpoint encouraged early scholars to push the dating of those first Buddha images into the 1st century BC, it is now broadly accepted that the earliest firmly datable examples, one of which is on a coin, belong in the reign of the Kushan Kanishka I (see Ch. 2 §D.5.1). Gandharan art is therefore fundamentally a Kushan-period phenomenon. Unlike the contemporary school of art in the city of Mathura, which has received only scant attention (van Lohuizen-de Leeuw 1949; Czuma and Morris 1985, Sharma 1995; Quintanilla 2007), Gandharan art has become a major focus of scholarly study and archaeological attention (see bibliographies in Deydier 1950; Guenée 1998; Dar 2004).

Gandharan sculpture is rarely inscribed with dates, and consists of many regional schools, which make the interpretation of its stylistic development difficult. In the absence of detailed archaeological excavations which could be independently dated and thus form the backbone of a chronology, scholars depend upon concepts of stylistic developments. Unfortunately these often hinge more on assumptions of the primacy of Greek art and on earlier concepts about the chronology of the region than on the evidence now available (Cribb 2016a). The need for a firm chronology to understand the development of archaeological sites in Gandhara is not unique: there are similar but less pronounced problems in the province of Bactria to the north, and throughout the territory Kushan coins circulated in. It has long been recognised that, given the absence until recently of C14 dates (Olivieri *et al.* 2019), coins have been the only type of evidence which would make a reliable chronology for Gandharan art possible (Errington 1999–2000; Cribb 2018a, 30, tab. 7), despite the limitations on their use (see §3.3 below).

Gandharan art is not an exceptional part of Kushan studies. In the last 30 years there has been a growing interest in understanding the Buddhist community whose rules of conduct are recorded, with abundant commentary, in the *Mūlasarvāstivāda-vinaya*. It has been the primary focus of the work of Gregory Schopen, influentially republished in a series of collected volumes (Schopen 1997; 2004; 2005; 2014). The political context of that religious and social history is fundamentally the Kushan empire, and it is likely that Kushan-period monks transmitted the text to China. Just like the art this element of Kushan studies needs to be contextualised, and that means understanding it in relationship to other evidence of the period, including the coins.

2.3.4 As a response to new evidence

As already argued, numismatics is, in Bernstein's terminology, a hierarchical system of knowledge (see §2.2.4 above). It is necessary to answer certain questions before asking others. However, this does not imply that numismatics is insular. In many cases advances are driven by new evidence, not always numismatic. For example, Cunningham's initial typology (see §2.2.1 above) depended in large part on the assembly of a very large body of coins for the first time, facilitated by the creation of the Archaeological Survey of India (Imam 1966; Chakrabarti 1988, 48–119). Göbl's reappraisal (see §2.2.4 above) was triggered by his attendance at the 1960 London conference on the Date of Kanishka (Basham 1968), which itself demonstrated a wide range of new types of evidence at the disposal of scholars (see §2.2.2 above). Indeed, the central question of that conference has subsequently been resolved in large part due to new evidence (Bracey 2017; Cribb 2018a). The accumulation of and the response to new evidence is a normal part of historical study.

Some of that new evidence since 1984 is in the form of coins, for example a new divinity on the gold coins of Huvishka and in one case a parcel of coins representing a previously unknown production centre (J.C2-i 1u). In general all new discoveries represent an incremental improvement in the sample. However, the bulk of transformative new evidence discovered since Göbl's publication (1984) is not numismatic in nature.

Most significant for this publication was the discovery of the Rabatak inscription in 1993 (Sims-Williams and Cribb 1995–6). Discussed extensively in Chapter 2, it provided a genealogy for the early Kushan kings, adding an additional ruler, Wima Takto, long expected from the coins (MacDowall 1968) but frequently dismissed before that point and still doubted by some since (Fussman 1998, 604–5, 620; Mukherjee 1998; 2004, 11, 167). It also gave new information on the Kushan pantheon (see Ch. 2 §D.5.2) previously only known from the coins. However, the Rabatak inscription is not the only new inscription. The Kamra inscription (see

Ch. 2 §H.4) was only correctly read a few years before Göbl's work (Bailey 1982). The Senavarma inscription was published two years before that (Bailey 1980; see Ch. 2 §A.6), and at least two dedications by karalrangs, high officials at the court, have been published more recently (Sims-Williams 2015; Ch. 2 §F.3). Collectively these have significantly deepened our understanding of the Kushan state, including a new appreciation of the central role the karalrangs played, without which it is unlikely their presence on coins would have been fully appreciated (Ch. 3 §E.5, cat. E.C2-ii reverse 4i and 4j). As already discussed (see §2.3.1 above), new evidence has resolved much of the chronology, for example the discovery of a triple-dated inscription fixed the relationship of the Azes and the Yona era (Salomon 2005).

Accompanying the publication of new inscriptions has been the discovery and publication on a large scale for the first time of manuscripts from the Kushan period. Documents in Bactrian were first discovered in the early 1990s (Sims-Williams 1996), and a cache of Buddhist texts in Gandhari only a few years later (Salomon 1999). From a situation where no manuscripts existed a few decades ago there are now dozens of volumes dedicated to the translation of Kushan or Kushano-Sasanian period texts, all of which depend to some extent on the existing discussions of political chronology for their context (Sims-Williams and de Blois 2018), and many of which mention money or kings, creating new opportunities for research.

Importantly there has been ongoing archaeological work throughout the last half century, some of which has informed the attribution of coins, such as the excavations at Sonkh (Härtel 1993), or the ongoing publication of Central Asian finds which have informed the attribution of Kujula's coinage (see Ch. 3 §A.2). The quantity of new data is huge. Just examining those archaeological missions for which a bibliography is available (Olivieri 2006) will take many decades to integrate with existing historiography and other sources. For example, archaeological work has been ongoing for nearly a decade at the site of Mes Aynak. Today the site is a commercially important source of copper and it may have been used for the same purposes in the past. It is even possible Mes Aynak was the source of the copper used for Kushan coins, but at the time of writing final reports are still awaited.

In addition there has been a concerted attempt to revisit earlier excavations, often only partially published, of which the most fruitful has been the publication of material relating to Charles Masson's excavations and site finds in Afghanistan (Errington 2017a; 2017b; 2021a; 2021b). This has substantially deepened the understanding of coin finds from Begram (Cribb 2021), which was probably the main copper mint of the Kushans throughout the 2nd century. Gul Rahim Khan's republication of the coin finds from Marshall's Taxila excavations (see §1.3 above) have also been revelatory in a similar way.

2.4 As a response to wider historical studies

For reasons already discussed, this publication's point of departure is a political history initiated in British imperial scholarship and a numismatic publication rooted in the 'Vienna School'. However, recent trends in wider historical and material culture studies have focused on very different subjects and these need to be addressed. At least three trends are particularly relevant: a shift away from political history as a subject of study; a series of alternative approaches to material including the concept of object biographies; and a self-reflective turn in the humanities more widely.

In the 19th century history meant essentially political and military history, and was often the history of dynasties, and of great men (almost always men). For ancient India, and to a lesser extent Central Asia, which has never developed a pre-Islamic military historiography that primarily meant the succession of kings. So, Vincent Smith (1904) framed the 15 chapters of his early history in terms of dynasties (the Guptas, Indo-Scythians, and Kushans) or individuals (Alexander, Chandragupta, Harsha). This construction neatly fitted with his interest in large imperial powers and the men who ran them. Smith's political history has come to occupy a smaller and smaller part of historical narratives as the 20th century progressed. In Romila Thapar's more recent history of India (2002) only the Mauryans receive a chapter heading. Instead thematic topics, such as trade or religion receive the main focus.

Similarly the study of material culture has changed dramatically in the last 30 years. There are a huge range of different theoretical approaches but what most share in common is to see all aspects of an object as valuable. This is best exemplified by the concept of the 'object biography' (Elliot *et al.* 1982; Appadurai 1986; Kopytoff 1986). A coin can be thought of as having a story to its life, from the mining of the ore, through its production, ancient use as a medium of exchange, potential re-use, loss or disposal, rediscovery and storage or display in a museum collection. Thought of in this way it is difficult to privilege any one moment in that story over the others. There is nothing special, in this sense, in the moment a coin was created or even in its ancient use over its modern (Cribb 2006, 505–6).

Of course in this publication we have precisely privileged the moment a coin was made and the political history it might inform – though Chapter 4's recording of the information on acquisition is a strong concession to the idea of object biographies. The reasons for this have already been laid out in detail (see particularly §2.3.1 and §2.2.4 above), and that they need explaining indicates the self-reflective turn history has taken. In the light of the postmodern critique of historical study there are few historians who would dispute the constructed nature of their work. There is never a single value-neutral presentation, even for primary sources. That self-reflective turn has underpinned the structure of this publication, separating the catalogue from the reconstruction (Chapter 2) and the numismatic argument (Chapter 3) and seeking throughout to lay out the evidentiary basis and the line of reasoning involved. Assumptions cannot be eliminated but they can be acknowledged (see §3.4 below).

3 Implications

The authors have assumed that numismatic evidence is of some interest to a wide audience. This work seeks to present the current state of knowledge on Kushan coins in the

manner numismatists have found most flexible: the type catalogue. In order to frame that and to establish a firm evidentiary basis for one aspect of Kushan studies it lays down further layers of interpretation in Chapters 2 and 3. As dynastic history is the subject most frequently discussed in the last century and a half of historiography, that is the subject addressed in Chapter 2 – its problematic origin in the same colonial moment that created the collections drawn upon notwithstanding (see §3.4 below). However, the authors would contend that an up-to-date and comprehensive typology of Kushan coins, something which has not been available since 1914 (Whitehead 1914), has greater potential than simply laying to rest outstanding questions of political chronology. It eliminates many discourses which have been based on long-defunct frameworks. It suggests further avenues for numismatic research; implicitly makes an argument both for the importance of Kushan studies and the need to devote further attention to their contemporaries; and offers overdue contextualisation for art historical, religious and textual studies.

3.1 Kushan coins

Several alternative ways to present the data in this publication have already been suggested. There remains a genuine need in Kushan studies for a sylloge project across multiple collections that would significantly enhance the data available for numismatic study. Although Pakistan is relatively well served (Whitehead 1914; Ali *et al.* 2004; Khan 2009a; 2009b; 2010a; 2010b), most European, North Indian and Central Asian collections remain unpublished apart from their coverage in Göbl (1984; 1993a). Online databases are an important supplement to this but not a replacement, with the only subcontinental example, the Museums of Rajasthan database (http://www.ancientcoins.rajasthan.gov.in/), offline at the time of writing. There is also a need for a corpus of both Kushan hoards and archaeological finds. If such a corpus were framed in terms of a typology organised by production, possible due to this publication, it would frame two major moments in the object biographies of the coins.

Such studies are possible without a comprehensive typology (see for example Zeymal 1983) but they become more practical, and more useful with one. In the terms of Bernstein (see §2.2.4 above) numismatic knowledge is, unusually in the humanities, hierarchical, and answering this question makes it possible to ask others. Just as this publication uses the opportunity of a typology to establish a firm evidentiary basis for the dynastic history, so studies such as those suggested which build on it would allow a similar economic, monetary or social history.

3.2 Chronology

For most of the 20th century the question which dominated any discussion featuring the Kushans was the so-called 'date of Kanishka' (see §2.3.1 above). This publication takes that question as settled, though that is not the first such claim (Jongeward 2020, 88). However, chronology is more than a function of just one date, and coins can contribute directly to more than simple political chronology. Take for example the well-known legal codes of North India. The late centuries BC and the 1st millennium AD saw a process of monetisation, of thinking in monetary terms, throughout South and Central Asia, of which coins were only a part. So the earliest legal codes, the *Dharmasūtras* (Olivelle 1999), almost exclusively express penalties in terms of seizure, penance or punishments, while law codes of the Kushan period, or the surviving contracts of the Kushano-Sasanian period, frequently express penalties as fines in coins or units of account which share the names of the coins (Sims-Williams 2007; 2012a; see Ch. 3 § Z–Z-I).

In fact, so pronounced is the effect of monetisation on normative or prescriptive texts that Patrick Olivelle linked it to the dating of two of the best known, the *Arthaśāstra* and the Law Code of Manu. While Olivelle believes Manu's text is likely the work of a single author he accepts that the *Arthaśāstra* was produced from several earlier texts, and subject to a substantial revision. Manu, he argues, must have had before him a copy of the *Arthaśāstra* before its revision. Importantly he points out that while gold coins (*suvarṇa*) are known in Manu's text, where they are required for certain fines, they are entirely absent from the *Arthaśāstra* (Olivelle 2013, 27–9). Coins *per se* are not absent in the *Arthaśāstra*. It extensively expresses payments and fines in units of account *(paṇa)*, and comments on the manufacture of coins in copper and silver, denominating the latter in *paṇa* (*Arth.* 2.12.24–6: Olivelle 2013, 128–9), but never in gold. Olivelle reasons, and there can be little argument with this, that the author of the *Arthaśāstra* must have lived in a world where the use of gold coinage was unknown, while Manu lived in one in which it was. He identifies the critical moment as the introduction of gold coinage by Wima Kadphises (Ch. 3 §C.2), and reasons from this that the major part of the *Arthaśāstra* was written prior to that, 'a date close to or before 100 CE' (Olivelle 2013, 29), and that Manu's work must post-date that point (Olivelle 2004, xxiii).

This line of reasoning is sound, but the details of the coins matter. In particular the evidence suggests that the gold coinage introduced under Wima Kadphises was a continuation of older practices of issuing sporadic gold coinage (see Ch. 3 §C.2–3) and was not really intended to circulate as part of the normal monetary system. In all likelihood these coins were made in Afghanistan, not India, possibly at Balkh which became the main mint into the 3rd century AD (Ch. 3 §C.1). The regular issue of gold coinage did not begin until the start of Kanishka I's reign, and a South Asian gold mint was not opened until the end of his reign, *c.* AD 150 (Ch. 3 §D.4). Only with this later date is it likely that Kushan gold would be known to writers in northern India who lived beyond the empire's borders. The logic of using references to silver [*kārsā*]*paṇa* as a means of dating textual sources is further confused by the survival of this denomination into the Kushan period as a money of account after gold coinage had been introduced (see Ch. 3, introduction).

It is the contention of the authors that Kushan coins, which were used for 400 years across a vast part of South and Central Asia, have potential implications for a wide range of related fields, but that previous publication of Kushan coins has often made it difficult for scholars in other fields to use them. For example, publications of the Pali

Therigatha do not recognise that the conventional translation is incompatible with the accepted dating of the text, as most translators accept ancient commentators' claims that gold coins are referred to but believe the poems date to the centuries BC (contrast verse 284 with Norman 1971, xxxi/§28; Hallisey 2015, vii–viii). The irony here is that the work of the ancient commentarial tradition (Pruitt 1998, 276) is more accessible than modern numismatics. Even where, as in Olivelle's case outlined above, authors seek out numismatic evidence, interpreting it is made difficult precisely because the literature lacks comprehensive overviews and commentaries of major series. Chapter 3 in particular is a response to this widespread, if not widely recognised, problem.

3.3 Archaeological dates and numismatic production

There is one area in which the utility of numismatics is unquestioned and widespread, and that is archaeology. Kushan coins are found exceptionally widely, because they spread outside the empire. At the most extreme they have been found in the United Kingdom, in Russia, in Africa, in Iran and Southeast Asia, but even excluding these more unusual cases they are a common artefact on archaeological sites from Uzbekistan to northern India, from the 1st to the 5th century. Numismatists would like to use the stratigraphy of the sites to better understand how coins were used as money. It would be desirable, for example, to understand why monks seem to have more use of money than the wealthy urban elites (Schopen 2004, 1–18). However, it is important to recognise that in this period (with the exception of dated inscriptions and more recently C14 dating) they are usually the only dating tool in most archaeological contexts, and will remain so until reliable dendrochronology sequences are established for the 1st millennium (Bivar and Bridge 1989; Grant 1992; Palmer and Ahmed 2011, 21–3; Sangzai and Ahmed 2011; Gaire *et al.* 2013; Opała *et al.* 2017; Opała-Owczarek *et al.* 2018).

In this regard it is imperative that coins be accurately attributed and comprehensively secured to a usable chronology reflecting current research – something this publication has sought to do. The problems of incorrect attribution are apparent in the case of the Bimaran reliquary (Cribb 2015; 2016a; 2018c) and of uncertain attribution for post-Vasudeva copper coinage (Fussman 1990). Copper coins depicting a standing king and god before a bull are the iconography of both Kushan and Kushano-Sasanian coins from AD 230 to the 4th century. However, if they are treated as a single body of material they lose much of their value for dating (cf. MacDowall and Callieri 2004). Until Gul Rahim Khan's work on the collections of Taxila Museum (§1.3) that was largely the state of knowledge in Kushan numismatics, with many coin types only loosely attributed to long periods. Importantly the coins need to be connected to a coherent chronology, and that is only possible in a comprehensive presentation. If an archaeologist employed Göbl's classification in *System und Chronologie der Münzprägung des Kušānreiches* (1984) but rejected the idiosyncratic chronology proposed by its author how would they produce dates? If they consulted other authors for particular types, they run the danger of incorporating mutually exclusive chronologies (DeCaroli 2015 has exactly this issue in its figure captions, which can differ by as much as 70 years in the dating of contemporary objects).

This publication provides a chronological tool for Kushan coins. For Gandhara and surrounding regions, amongst the most intensively studied, it complements already existing typologies of Indo-Scythian and Indo-Parthian coinage (Senior 2001). However, it is important to recognise some limitations. The use of coins to date archaeological material creates for the numismatist an obligation that does not end with a description of production. As is widely recognised (Cribb 2007c, 383–4; Lockyear 2012) the chronological relationship between a coin's manufacture and archaeological strata is complex. Much of that complexity is the technical speciality of the archaeologist, but it is the numismatist's responsibility to indicate the period of circulation of a coin – for how long was that type of coin available so that it might be deposited? The period of production establishes a *terminus post quem* but not a *terminus ante quem* and can make a poor proxy for accurate dating of strata although it has been relied on in most South and Central Asian archaeology.

Hoards of coins, which often preserve a sample of circulating coinage, provide invaluable evidence for the period of circulation, and they indicate quite significant differences in the length of circulation of different coins. Coins issued under Wima Takto (*c.* AD 90–113) are rarely found with those issued under his successors, while copper coins issued under Wima Kadphises (*c.* AD 113–27) are routinely found with the earlier, heavy-weight types of Huvishka (*c.* AD 151–90). This implies that the coinage issued under Wima Takto enjoyed a very brief period of circulation, perhaps less than 20 years, while those under Wima Kadphises remained in circulation for half a century or more. This is also complicated by geography, for as discussed in Chapter 2 (§D.1.1) there is good reason to believe Kushan copper coins in the middle Gangetic valley arrived there late in the 2nd century AD and continued to circulate for some time. Unfortunately this publication cannot offer a full commentary on circulation but it does lay the groundwork for a substantive re-examination of hoards and archaeological finds.

3.4 Kushan studies in a period of decolonising the curriculum

In 2018 the School of Oriental and African Studies published a document entitled 'Decolonising SOAS Learning and Teaching Toolkit for Programme and Module Conveners'. It concerned itself with a variety of subtle effects the curriculum and teaching had on the education of students:

> A background assumption for us is that global histories of Western domination have had the effect of limiting what counts as authoritative knowledge, whose knowledge is recognised, what universities teach and how they teach it (Decolonising SOAS Working Group 2018, 3).

This is not a new idea and it broadly reflects ideas common in historiography dating back to Edward Said's influential critique in *Orientalism* as 'a kind of intellectual authority over the Orient within Western culture' (1978, 27). It is interesting, however, because it originated with

consumers (mostly students) of academic research, not the producers of it. The idea of 'decolonising' has also been increasingly turned on museums, asking if institutions whose collections resulted from the economic and power inequalities of the 19th century are able to transcend that origin. The assumption, common to these critiques is that *what* is taught can communicate normative assumptions, about the importance of Greek origins, the centrality of European civilisation, or male political spheres, even if you change *how* it is taught. It is very similar to the arguments made earlier in this introduction that numismatists construct rather than present the evidence:

> One may further acknowledge that there is no 'view from nowhere' or Archimedean point from which to begin thinking about a subject (Decolonising SOAS Working Group 2018, 8).

Earlier (see §1.3 and §2.2.1 above; Ch. 4) it was established that the focus of both the British Museum Kushan collection and the subsequent publication on political history and chronology are colonial products. The collections exist because collectors leveraged political and economic power created through European imperial power. Although not part of the British regime in South Asia, even Europeans like Honigberger, or the Lafont brothers, who were not British, and Indian scholars like Bhagvanlal Indraji (Dharamaśī 2012) participated in this power structure. The historiography focuses on politics because the work of administrator/scholars like Cunningham and Smith reflected European and imperial concerns and objectives. This is not a subtle effect. In one of the earliest catalogues the manifest destiny of the British Empire is directly used to justify interest in the material:

> The intrinsic interest of the coins described in this work is great, and they make a strong appeal to the favourable notice of collectors, especially to those belonging to that European nation which is the first to have accomplished from the sea what Greece did from the land, and so may be regarded as the legitimate successor of the Greeks in the Panjab (Whitehead 1914, v).

These ideas were slow to die. They strongly influenced the work of Robert Göbl, particularly his insistence that the Kushan mints must have employed Roman die engravers (Göbl 1984, 29, 59; see Sinisi 2017 for a deconstruction and rebuttal). This publication not only works with that colonial era data but frames it in terms of answering the questions originating in colonial era historiography, often to the exclusion of more recent academic trends (see §2.2.4). This raises the question (deferred from §2.2.1 above) whether the approach can compromise the answers.

The first thing to acknowledge is that it is possible for a question's origin in a political context to so fundamentally compromise it that there is no academic worth in an answer. This is apparent for example in the question of what the term 'Kushan' represents (Ch. 2 §2). In this publication what the term means is treated almost exclusively as a question of definition. Either what do we mean by it today, or what disparate meanings did it have in ancient sources. A century or more ago it would have been discussed as the 'origin' of the Kushans and framed in terms of race. Cranial shape, as inferred from the coins, and skin colour, as described by Chinese texts, were employed to try and classify the race of the Kushans (see Kennedy 1912, 670; Smith 1903, 5; summary in Thomas 1913, 631). In 1923 John Marshall, head of the Archaeological Survey of India and excavator of Taxila, gave a lecture to the Royal Society of Arts in London entitled 'Influence of race on early Indian art' stating: 'These gifts and qualities of the Indo-Aryans sufficiently account for their superiority over the races with whom they came in contact' (Marshall 1923, 662). This was not particularly unusual at the time. Three years later the race of the Kushans as 'a Scythian race of Aryan stock' was mentioned in another lecture in the same series by Sir Michael O'Dwyer (1926), the lieutenant governor of The Punjab under whose authority the Amritsar massacre took place, all despite the sources making it explicit that Kushan is the name of a dynasty rather than a people (Ch. 2 §2).

Historians today know that 'race' is a fallacy resulting from a conflation of phenotype, ancestry, language and ethnicity, and that its only 'reality' is as a set of European ideas and social constructs. However, while that is well understood by historians it is still a concept widely employed in our society – and in that respect has none of the distance that makes Whitehead's belief in the British Empire's claim to the Punjab comical. Historians are often horrified to discover some of these fallacies survive in other fields (Eckstein 2013, 283), and occasionally they do filter back into historical literature, with attempts to rehabilitate craniometry or other debunked tools (Mallory and Mair 2000, 231–47).

So the question of the 'origin' of the Kushans is closed to us. There would be no way to disentangle ourselves from its history, but is this an exceptional case? Is there a wide range of questions which by asking we reinforce the concepts and ideas which first inspired them? There is no straightforward answer. The strength of knowledge systems that do not build on each other but which develop a series of specialised views, in Bernstein's terms (see §2.2.4 above), is that questions which are compromised by these kinds of assumptions can simply be discarded. However, that cannot be done from a numismatic point of view. Numismatics is, in Bernstein's terms, hierarchical, and certain questions need to be answered before others can be asked. That necessitates a type catalogue, which necessitates engaging with a historiography that is probably more focused on imperial power than the primary sources warrant.

Perhaps the effort spent on deepening our study of Kushan coins might have been better spent on an understudied contemporary, such as the Magha dynasty (Ch. 2 §D.6.2). That would still have engaged with a historiography focused on political history, though more nationalist than colonial, but it would at least redress some of the imbalance in publications which underpins Kushan exceptionalism (see §2.3.2 above) and strike a blow against the founding Euro-centric assumption that coins are more worthy of study because they look more 'Greek'. Leaving aside the arguments that work on Kushan coins is needed, we simply could not have written such a publication. The collections were formed by people with the same backgrounds as the people who framed the first questions, and as a result the British Museum's holdings of Magha

coins are as impressive for their paucity as the Kushan collection is for its size.

The honest answer is that the study of Kushan coins cannot be 'decolonised' in any simple step. The questions we have are, in part, a function of the cultural attitudes of our predecessors, and the evidence is what they chose to record. Making progress requires building on that previous scholarship to some degree and some of that scholarship's assumptions inevitably go unquestioned. The best that can be done is to face the problem directly and seek to address omissions where possible. Numismatic study is ultimately made of small incremental steps, and we can only hope that readers understand why we chose to take this step rather than another.

Chapter 2
History of the Kushans and their Successors

The Kushans were the rulers of a vast state in Central and South Asia from the 1st to the 4th century AD. This was originally based in the territory of the upper Amudarya (Oxus) river and its tributaries in south-western Tajikistan, northern Afghanistan and south-eastern Uzbekistan, and by the 2nd century AD the Kushans had extended their rule through central Afghanistan and Pakistan into India. They maintained their claim to imperial power until the mid-4th century, in spite of a gradual loss of territory, initially to Sasanian Iran and then to the Kidarite Huns (often referred to in numismatic literature as the Iranian Huns). Claim to their domain was made by the rulers inflicting these losses. The Sasanian princes who took over the Kushans' north-western territories, and the Kidarite Huns who followed them and extended their rule over even more Kushan territory, both adopted the title 'Kushanshah', i.e. king of the Kushan state. The Kushan name of the kingdom came to an end when the Sasanian emperor Peroz (AD 457–84) defeated the Kidarite Huns in Bactria, and was not resurrected when the Hephthalites in turn defeated Peroz.

1 Numismatic and epigraphic evidence and Kushan history

The purpose of this publication is to apply the results of numismatic classification and research to the study of Kushan and Kushanshah history, particularly in relation to establishing a framework for the examination of other forms of evidence.

The structure and chronology created from coins and dated inscriptions provide a framework for the Kushan kings and their successor dynasties, which allows an understanding of the progress and extent of the dynasty to be understood and for the evidence of them to be assigned to the appropriate ruler and period.

Kushan coins form a unique record of the Kushan kings because their sequence of issue can be established through a study of their designs and production process. From this evidence, such as the recognition of changes to the language and scripts used on the coins, the continuing work of die engravers from one reign to the next, the re-use of dies from one reign to the next and the system of mint control marks which overlap reigns (**Table 2.2**), the coins can be arranged in a production sequence which shows the sequence of the kings in whose names they were issued (Cribb 2018a). By including all known coin varieties in this catalogue the sequences from reign to reign (**Table 2.1**) have been reinforced by the progression of phases within reigns and the attribution to mints, even when the precise locations of mints remain to be discovered.

The relationships between the coins of the Kushans and their successors, established through the succession of designs, die links and overstrikes, also enables a framework to be established for the issue of their coins and therefore for their reigns (Cribb 1990; 1999a; 2010; 2018a).

The sequence of kings established through the numismatic sequence has allowed the dated inscriptions relating to Kushan kings to be placed in the correct order. Previously the use of dates in the 20s by the Kushan king Vasishka placing him during the reign of Kanishka I, and of year 41 by his son Kanishka III placing him in the reign of

Order of kings	Coin list	Kushan kings	Dates AD	Dates in inscriptions and from overstrikes etc.	Indicated range of AD dates from inscriptions	Relationships from inscriptions
1	A	Kujula Kadphises	*c.* 50–90	Azes era 122, 126, 136	76–90	
2	B	Wima Takto	*c.* 90–113	Greek era [270], 279	96–105	son of 1
3	C	Wima Kadphises	*c.* 113–27	Greek era 287, [299]	113–25	son of 2
4	D	Kanishka I	*c.* 127–51	Kushan era 1–23	127–49	son of 3
5	E	Huvishka	*c.* 151–90	Kushan era 26–60	152–86	
6	F	Vasudeva I	*c.* 190–230	Kushan era 64–98	190–224	
7	G	Kanishka II	*c.* 230–46	Kushan era [1]04–[1]20	230–46	
8	H	Vasishka	*c.* 246–67	Kushan era [1]22–[1]30	248–56	
9	I	Kanishka III	*c.* 267–72	Kushan era [1]41	267	son of 8
10	J	Vasudeva II	*c.* 267–97			
	N	[usurper Meśra]	*c.* 297–300			
11	K	Mahi	*c.* 297–302			
12	L	Shaka	*c.* 302–42	Contemporary of Samudragupta		
13	M	Kipunadha	*c.* 342–52			
		Kushano-Sasanian kings	**Dates AD**			
1	R	Ardashir I	*c.* 230–5			
2	S	Ardashir II	*c.* 235–45			
3	T	Peroz I	*c.* 245–70	Contemporary of Vasudeva II		
4	U	Hormizd I	*c.* 270–300	Contemporary of Vasudeva II		
5	V	Hormizd II	*c.* 300–3			
6	W	Peroz II	*c.* 303–30			
	X	Shapur II (Sasanian emperor)	*c.* 309–79	Ruling in Begram region from *c.* 330		
7	Y	Varahran	*c.* 330–59	Contemporary of Shapur II		
		Kidarite Huns	**Dates AD**			
1	O/ Y-O	Kirada	*c.* 345–50	Contemporary of Varahran		
2	P/ Y-P	Peroz	*c.* 350–5	Contemporary of Varahran		
3	Q/ Y-Q/ Z	Kidara	*c.* 355–85	Contemporary and successor of Varahran		
4	Z-A	Orōlano	*c.* 385–400			
5	Z-B	Pidoko	*c.* 400–30			
6	Z-C	Tobazino	*c.* 430–5			
7	Z-D	Ōkilano	*c.* 435–50			
8	Z-E	Ōzmano?	*c.* 450–67			
		Sasanian emperor	**Dates AD**			
	Z-F	Peroz	*c.* 457–84	Ruling Balkh 467–76		
		Huns	**Dates AD**			
	Z-G	anonymous	*c.* 476–80	Hephthalites capture Balkh *c.* 476		
1	Z-H	Mehama	*c.* 480–500			
2	Z-I	Adomano	*c.* 500–20			

Table 2.1 Kushan kings, Sasanian and Kidarite Hun Kushanshahs, and Hephthalite successors at Balkh

King	Die-linked	Shared control marks	Linked by engraving style	Greek and Gandhari	Greek	Bactrian	Bactrian name and Brahmi control marks	Bactrian and Brahmi name and Brahmi control marks	Illegible Bactrian, Brahmi name and control marks	Brahmi name and control marks
Kujula Kadphises			x	x	x					
Wima Takto			x	x	x					
Wima Kadphises			x	x	x					
Kanishka I	x		x		x	x				
Huvishka	x		x			x				
Vasudeva I	x	x	x			x	x			
Kanishka II	x	x	x				x			
Vasishka		x	x				x			
Kanishka III		x	x				x			
Vasudeva II		x	x				x	x	x	
Mahi			x						x	
Shaka			x						x	x
Kipunadha			x							x

Table 2.2 Numismatic sequence of Kushan kings

Huvishka caused much confusion in the interpretation of the chronology (Mukherjee 1967, 68–79). The establishment of the coin sequence showed that Vasishka and Kanishka III ruled long after Kanishka I and Huvishka. Recognition of some aspects of this had been made by the art historian Johanna van Lohuizen-de Leeuw (1949), but were not confirmed by coin evidence until Robert Göbl (1965) identified the coins of Vasishka and related them to the sequence of inscriptions (Rosenfield 1967; van Lohuizen-de Leeuw 1986). This discovery was reinforced by the identification of three separate sets of coins in the name of Kanishka, separated from each other by the coins of other rulers. The first Kanishka's coins were followed by Huvishka and Vasudeva coins, then the second Kanishka's coins were followed by Vasishka coins and finally the third Kanishka's coins were followed by coins of a second Vasudeva. The coins of each of these Kanishkas were in a different style and the first set had no control marks, while the second and third had them, but used different sets. It is from these types of evidence that a sequence can be established, and which permit only one conclusion: that there were three Kushan kings called Kanishka, and therefore that the dated inscriptions must be distributed accordingly.

The inscriptions naming Kushan kings were composed in Bactrian, Gandhari, or Epigraphical Hybrid Sanskrit,a language mixed with varying amounts of Sanskrit which was probably never spoken but represents a more 'formal' register for public inscriptions (Damsteegt 1978, 81–6). These languages were written in the inscriptions using Greek (with modifications), Kharoshthi and Brahmi scripts, respectively. Lists of them have been published by Konow (1929), Lüders (1961), Rosenfield (1967), Shrava (1993) and Baums (2012; 2018). Kharoshthi inscriptions have received a standard catalogue treatment using modern database technology, the digital Corpus of Kharoshthi Inscriptions (CKI https://gandhari.org/catalog?section=inscriptions), which is used here to identify each Kharoshthi inscription. The most recent list of Kushan inscriptions, compiled by Skinner as an appendix to his doctoral dissertation (2017, 244–364), and for Brahmi inscriptions the numbers in Shrava (1993), are also used in this study. Four eras have been used to date them: the Azes era, the Greek era, the Kushan era and the second Kushan era. The relationships between these eras allow a continuous chronology to be established for the kings named in them (**Table 2.1**), and with modest margins of error allow an absolute chronology to be established (Cribb 2018a). This in turn supplements our understanding of the coinage from which purely numismatic techniques can establish only a sequence and thus a relative chronology.

2 The meaning of Kushan

Contemporary sources make it clear that the word Kushan was the dynastic name of these rulers rather than the designation of the people they ruled. The term Kushan is first attested in the title 'Kushan yabgu', which was held by Kujula Kadphises, the ruler who established the Kushan empire, and perhaps by his predecessors as Kushan yabgu. The name Kushan 'is presumably a genuine Yuezhi word' (Sims-Williams 2002, 230) and not a loan word from an otherwise attested language. By the end of Kujula Kadphises' reign he was simply referring to himself as 'Kushan' (see §A.4 below) without the title 'yabgu' and most of his successors are known from their coins to have added 'Kushan' to the end of their own names, as in the Bactrian coin inscriptions from Kanishka I until Vasudeva II: ÞAONANO ÞAO name KOÞANO ('king of kings' name 'Kushan'). At the end of the reign of Vasudeva II, who was the tenth Kushan emperor, a ruler called Meśra, whose dress suggests he was not of the dynasty, copied the title

'king of kings Kushan' on his gold coins, probably as a usurper. When part of the Kushan empire was conquered by the Sasanian empire of Iran in the 3rd century and later by the Kidarite Huns in the 4th century the local rulers of both adopted the dynastic name as a state name calling themselves 'Kushanshah', king of Kushan, i.e. ruler of the kingdom previously ruled by the Kushan kings. This usage also applies to the naming of the Kushan kingdom in an inscription of Sasanian emperor Shapur I, who claimed to rule the Kushan kingdom up to Peshawar (Pahlavi: *kwšnhštr HN prhš OL pškbwr*, Kaʿba-ye Zardošt inscription line 3, Huyse 1999, 24 and 36). The Kushans themselves do not seem to have used the word Kushan to refer to the territory they ruled and it is very rare in inscriptions, but they employ it routinely on their coins as part of their names. An issue of coins by Huvishka which reads ÞAONANO ÞAO OOHÞKO KOÞANO ÞAO on the first two dies at the subsidiary gold mint (E.G2-i, obverse 1A and 1B) is probably a simple engraver's error. Again, under the later Kushan ruler Mahi (K.G1 and K.G2) and the usurper Meśra (N.G1) the title KOÞANO ÞAO appears in their blundered Bactrian inscriptions on their gold coins, perhaps as an accidental copying of the end of [ÞAON]ANO ÞAO, rather than an intentional adoption of the Kushano-Sasanian title. The inscriptions on early gold coins of Shaka's main gold mint (L.G1-i) are also blundered and either repeat the mistake of the Mahi dies, or add another letter to make the inscription read ÞAONANO ÞAO KOÞANO ÞAKO; the wrong ordering of the conventional inscription, current from Kanishka I to Vasudeva II, suggests that this may still be a blundering rather than intentional adaptation. At the subsidiary gold mint (L.G2-i) the inscription beyond ÞAONANO ÞA is too blundered to make any determination of the die engraver's intention.

Our use of 'Kushan' owes more to modern practice than it does to that ancient usage. In this publication Kushan is used to designate the dynasty which included Kujula Kadphises and succeeded him, while the term 'Kushanshah' is used primarily for the Sasanian-backed dynasty (Kushano-Sasanians) and their Hun successors (Kidarites) who took territory from the Kushans. Coins and inscriptions enable us to identify thirteen rulers of the Kushan dynasty (**Table 2.1**), seven Sasanian Kushanshahs and eight Kidarite Kushanshahs. This publication also includes the Kushan-style coins of the usurper Meśra and the Indian king Samudragupta, and the Kushano-Sasanian coins which were issued in the names of two Sasanian emperors Shapur II (AD 309–79) and Peroz (AD 457–84), and of two Hun rulers Mehama and Adomano (late 5th to early 6th century).

As well as on their coins, the Kushan kings were referred to by the name Kushan in only a few inscriptions, both official and unofficial, found within their territory (**Table 2.3**). Their use of the title was also known to the 5th-century Chinese chronicler Fan Ye (*Hou Han Shu* 118.9a [88.2921]), who said, with reference to the reigns of the first two Kushan rulers, that they are called 貴霜王 *guishuangwang* (Old Chinese *kwəs-sraŋ-waŋ*, Later Han *kus-ʂaŋ-waŋ*: Schuessler 2009, nos 36-2, 3-55, 3-26), i.e. Kushan king (Zürcher 1968, 367; Thierry 2005; Hill 2009, 29; Yu Taishan 2014, 387). A Chinese Buddhist text *Abhidharma Mahāvibhāṣā Śāstra* (阿毘達磨大毘婆沙論 https://tripitaka.cbeta.org/T27n1545; Zürcher 1968, 387; see also Falk 2015a, 117, no. 100 for a similar text) translated from Sanskrit or Gandhari in the 5th and again in the 7th century seems to refer to a non-specific Kushan king in different translations as *qusha* (Late Han *gya-ʂa*, Middle Chinese *gju-ʂa*: Schuessler 2009, nos 2-7, 18-15) or *qushana* (Late Han *kʰut-ga-ṇa*, Middle Chinese *kʰjwət-*ɣa-ṇa: Schuessler 2009, nos 31-16, 1-15, 1-56). The original text is thought to date from the mid-2nd century AD (Lévi 1934, 11). It discusses the use of the title *devaputra*, so the link to the Kushans who use this title is clear and it is likely to refer in general to the Kushan kings up to the date when it was created, and represent a Gandhari usage, referring to the royal name, rather than the kingdom. The name Kushan is also used for an era, in the 3rd to early 4th-century AD Indian text the *Yavanajātaka* (Pingree 1978). This text has previously been dated to AD 269/70, but a subsequent study (Mak 2013, 60, 68–71) has shown that the period of its production cannot be so precisely fixed. It can be placed in the 3rd to early 4th century because the Kushan era it mentions is only a century long and runs from AD 227–326 (Falk 2001a; Mak 2013, 96–8). The term Kushan is also encountered later as a component in the personal name Kuṣanasena, and possibly Kurṣanasa, in Central Asian Kharoshthi documents written in Gandhari (CKD 5, 136, 399, 117).

The term Kushan was rarely used of the Kushan empire in any other ancient sources. The Syriac philosopher Bardaisan writing in the late 2nd to early 3rd century seems aware that the Bactrians were 'known as Kushan' (Bardaisan, *Laws of the Nations* 41: Alcock undated; Drijvers 1965). However, the name Kushan continued to be used after the end of the Kushan empire, when the state ruled by the Kushano-Sasanian and the Kidarite Hun Kushanshahs were referred to as Kushan in Classical and Armenian sources (see §R–Y.1 and §Y–Z.1 below). The same Kushanshah terminology can also be found in the Bactrian documents (§K–N.1) and on sealings (§Y–Z.1). Later the Iranian historian al-Tabari (5.820: Bosworth 1999, 15), writing in Arabic in the 10th century, mentioned a Kushan king (*malik kūshān*) submitting to the Sasanian emperor Ardashir I (AD 223–40).

In some accounts of the Kushans, there is the repeated but mistaken idea that Kushan was the name of a people. This seems to be based on an interpretation of the title Kushan yabgu as used by the first Kushan emperor and his predecessors. In later Turkish usage the title yabgu had the meaning of a tribal leader and this has been generalised to relate to the Kushan yabgu, suggesting that Kushan yabgu 'denote a ruler or succession of rulers either controlling a region called *Kuei-shuang*, i.e. *Kushāṇa*, or belonging to a tribe, group, sept or family having the identical name' (Mukherjee 1967, 13). This identification of Kushan as the name of a tribe persists in the literature (Rezakhani 2017, 53), but the usage in the Chinese sources of the term yabgu (*xihou*) always referred to an individual and the word Kushan is therefore personal to the Kushan yabgu rather than to the people or region he ruled (Cribb 2018b).

The term 'Kushan' is also often used in Indian archaeology to identify a particular category of ceramics,

Kushan king	Coin inscriptions		Inscription	Location	Status	Reference
Kujula Kadphises	Greek	ΚΟΡΡΑΝΟΥ ΚΟΡΣΑΝΟΥ ΚΟΡΣΝΑΟΥ ΚΟΡΣΝΟΥ ΧΟΡΑΝΣΥ				
	Bactrian	ΚΟΡΣΑΝΕΙ ΚΟΡΣΑΝ				
	Kharoshthi	*kuṣaṇa* *khuṣaṇa* *oṣaṇa*	*guṣaṇa*	Panjtar	Buddhist	Skinner 1; Konow 1929, 67–70; CKI 59
			khuṣaṇa	Taxila	Buddhist	Skinner 4; Konow 1929, 70–7; CKI 60
Wima Takto	Bactrian		ΚΟΦΑΝΟ	Dasht-e Nawar	Official	Skinner 6; Fussman 1974
		[ΚΟΦΑΝΟ]*				
	Kharoshthi		*kuśa* (?)	Dasht-e Nawar	Official	Skinner 6; Fussman 1974
	Brahmi		*kuṣāṇa*[*putro*]	Mathura image	Official	Skinner 7; Mitterwallner 1986, 59
Wima Kadphises	no recorded usage					
Kanishka I	Bactrian	ΚΟΦΑΝΟ	ΚΟΦΑΝΟ	Rabatak	Official	Skinner 14; Sims-Williams 2004
			ΚΟΦΑΝΟ	silver plate	Official	Skinner 16; Sims-Williams 2015
Huvishka	Bactrian	ΚΟΦΑΝΟ				
	Kharoshthi		[*gu*]*ṣana*	Hunza	Graffito	Shrava 195
			[*ku*]*ṣana*	Hunza	Graffito	Shrava 196
			kuṣana	Spinwam	Buddhist	Dani 1978; CKI 244
Vasudeva I	Bactrian	ΚΟΦΑΝΟ				
			ΚΟΦΑΝΟ	Pyxis	Buddhist	Falk and Sims-Williams 2017
Kanishka II	Bactrian	ΚΟΦΑΝΟ				
	Kharoshthi		*guṣāṇa*	Manikyala slab	Buddhist	Skinner 174; Baums 2012, 240–1; CKI 149
Vasishka	Bactrian	ΚΟΦΑΝΟ				
			kuṣāṇa	Sanchi	Buddhist	Skinner 182; Shrava 58
			guṣaṇa	Kamra	Well	Skinner 188; Bailey 1982
Kanishka III	Bactrian	ΚΟΦΑΝΟ				
	Tibetan		*kasana* or *kuśaḥi*			*Mahārājakaniṣkalekha* (§I.1) Hahn 1999, verse 49; Thomas 1903, 356
Vasudeva II	Bactrian	ΚΟΦΑΝΟ				
Mahi	Bactrian	ΚΟΦΑΝΟ				
Shaka	Bactrian	ΚΟΦΑΝΟ				
Kipunadha	no recorded usage					

* There is space for the name ΚΟΦΑΝΟ on the worn gold coin of Wima Kadphises which appears to have the inscription ΒΑΣΙΛΕΩΣ ΟΟΗΜΟ ΤΑΚΣΟΟΥ [ΚΟΟΦΑΝΟΥ ΥΙΟΣ] or [ΚΟΡΡΑΝΟΥ ΥΙΟΣ] (son of king Wima Takto Kushan) (Cribb 2014, 91, 94; Bopearachchi 2008, 6, no. 4). The other coins said to have similar inscriptions are modern forgeries (Bopearachchi 2008, 6, nos 1–3; Cribb 2014, 91–4; Bracey 2009).

Table 2.3 Use of the title 'Kushan' in relation to Kushan kings

both pots, figurines and bricks and to characterise Kushan strata in archaeological sites (Jayaswal and Kumar 2012; Jayaswal and Sharma 2012). The presence of the ceramics related to this term has led to numerous sites being identified as Kushan, implying that the culture and administration of the sites was directly linked to the Kushan empire. A similar but less pronounced confusion arises in Choresmian archaeology where artefacts such as pottery of the 1st to 4th century are often referred to as 'Kushan' (Helms and Yagodin 1997, 48). The archaeological validity of using such categorisation is without question, as there are distinct cultural horizons across the region (Prasad 2014, 128–65), but the way in which the label utilises the name of the Kushan dynasty leads to a confused account of the Kushan empire, and this mistaken understanding has been questioned (Ray 2010b, 7). The confusion arises because the use of the term 'Kushan' in this way creates the illusion that the Kushan empire held direct sway over the whole of northern India, whereas it is likely that Kanishka I's campaigns (see §D.1 below) were about establishing supremacy rather than establishing a local infrastructure to rule these areas. It is a dangerous overstatement of the

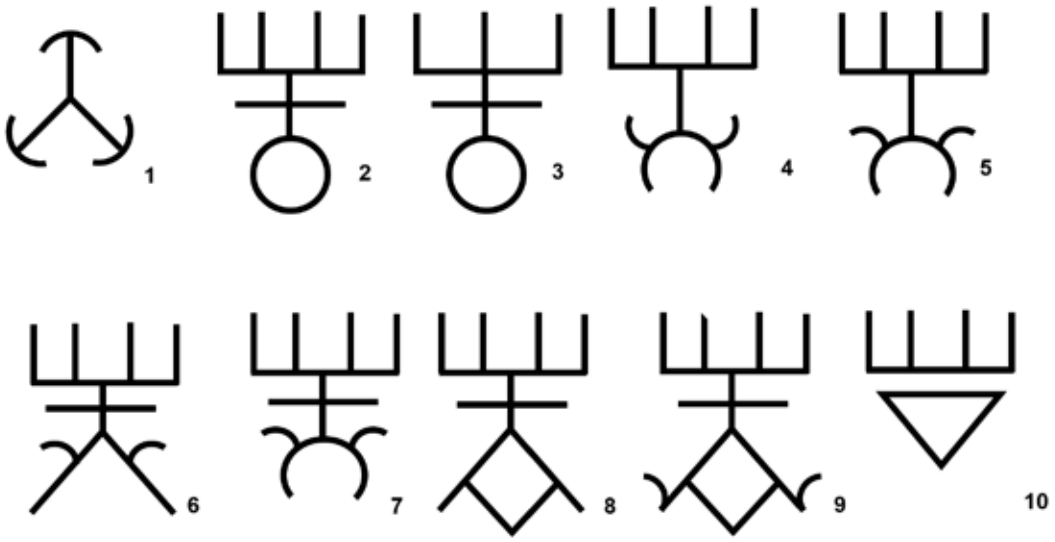


Figure 2.1 Kushan tamgas as featured on Kushan coins.
The shape of the Kushan tamga initially changed from reign to reign under Kujula Kadphises (1), Wima Takto (2–3), Wima Kadphises (4), Kanishka I (5), Huvishka (5–7) and Vasudeva I (8–9). After Vasudeva it adopted a fixed form (8), with most variations resulting from careless representations or simplification (10)

evidential basis to make a statement such as 'it is no longer a question of a few Kushana influences here and there but it seems that Kushans authority was working as a phenomenon, transplanting the whole Kushana complex with its coins, inscriptions, art forms, architecture, pottery etc. from the north west into eastern India' (Prasad 2014, 149). There is little substantial evidence for the proposal that there was a Kushan imperial administration beyond Mathura, as there are no Kushan official inscriptions or evidence of administration, like the Mathura mint, beyond this boundary. The mention of Kushan kings in religious inscriptions, as at Reh (§B.4), Sarnath (§D.6.2), Kosam (§D.6.2) and Sanchi (§H.2), cannot be taken as direct evidence of their rule.

3 The meaning of the Kushan tamga

From late in the reign of Kujula Kadphises until the end of the Kushan dynasty a form of symbol appears on all coins which is thought to be a symbolic statement of Kushan identity (Jongeward and Cribb 2015, 303–6). The symbol is commonly known as a tamga (or tamgha) and seems to be a remnant of the practice of branding livestock (Manassero 2013). The symbol has prongs rising from a bar at the top and various shapes below (**Fig. 2.1**). In its first appearance on the Soter Megas coinage issued by Kujula Kadphises it has four prongs rising from the bar, and below, another bar and a circle. This changes to three prongs after the first issues, and continues so throughout the reign of Wima Takto. Under Wima Kadphises, Kanishka I and Huvishka there are four prongs and the circle is open and has small curved appendages either side (curved up on the coins of Wima Kadphises and down on those of Kanishka I and Huvishka). On many of Huvishka's coins a bar is added between the bar with the prongs and the open circle. As Huvishka's reign progressed the open circle began to develop straightened sides, so it formed a Λ shape, and the curved appendages moved to the middle or the lower ends of the sides. Under Vasudeva I the bar below the pronged bar was retained and a V shape was added below within the Λ, and the curved appendages soon disappeared. This form of tamga continued to be used until the end of the dynasty, but often badly drawn. It was such a fixed part of the design that it continued to appear on all the gold coinages derived from the Kushan dinar, i.e. Kushano-Sasanian, Kidarite Hun, Gupta and Kashmir, often the same shape as used by Vasudeva I, but in the Gupta coinage it had many random adaptations (see the table at the end of Raven 1991, vol. 2).

A tripartite circular symbol appearing on one of Kujula Kadphises' Taxila copper mint issues (A.C4-i) has also been considered to be of a similar nature. It also appears on the coins of the Indo-Scythian satrap Mujatria (**Fig. 2.2**) (Cribb 2015, 30), perhaps as an indication of his association with the Kushan king. These symbols seem to have been a Kushan version of the symbol appearing on the coins of their predecessor Gondophares and the various Indo-Parthian kings who followed him as contemporaries of Kujula Kadphises (**Fig. 2.3**). The symbol took the form of a V shape over a circle on an inverted T base. The same symbol was also used on coins of the early Sasanian dynasty (Alram and Gyselen 2003, 258). The Kushans appear to have adopted the practice of using a tamga from their Indo-Parthian neighbours.

Figure 2.2 Base silver tetradrachm of Mujatria, satrap of Nagarahara (Jalalabad), *c.* AD 70–90, struck in the name of the Indo-Scythian king Azes II, with Mujatria's initial behind mounted king's back. (BM 1894,0506.637, 20mm, 9.37g; Senior 2001, type 139).
The tamga used by Kujula Kadphises is visible in front of the horse on the obverse of this coin

Figure 2.3 Base silver tetradrachm of the Indo-Parthian king Gondophares (*c.* AD 32–57), whose reign overlapped with that of Kujula Kadphises (BM 1894,0506.1556, 9.79g, 24mm; Senior 2001: type 216).
Kujula Kadphises' coinage adopted various elements of Indo-Parthian coinage design, such as this equestrian portrait with winged victory figure crowning the king (A.S.2). The Kushans adopted the use of tamgas like the one visible before the horse on this coin

Figure 2.4 Gemstone seal depicting a king riding on horseback with a Kushan tamga in before the horse, and nandipada symbol and Bactrian inscription ΑΛΔΡΟ behind the king's back (BM 1919,0709.2, bloodstone, 26 x 22mm; Callieri 1997: U 7.29).
This seal appears to be an official one and the form of the tamga is closest to that used on the coins of Wima Kadphises, on which the nandipada is also featured. A similar seal but with a different inscription is preserved in the Peshawar Museum (Callieri 1997, 7.17)

Figure 2.5 Clay impression from a seal marked only with the Kushan tamga (BM IOLC.2845, terracotta, 1.93g, 14mm).
This is probably an official seal and the barred version of the tamga as used on the coins of Huvishka suggests it was from his reign

The changing shapes of the Kushan tamga appear to relate to aspects of coin production. During the reign of Huvishka the two main forms of tamga, with or without central bar, were used to distinguish the product of the main copper mint, no bar, from those of the subsidiary mint in Gandhara, with bar (Ch. 3 §E.5), but at the main gold mint, the transition from no bar to with bar was chronological and marked a stage in the production of dies early in the reign (Ch. 3 §E.3). The addition of the V shape to the lower element, in the reign of Vasudeva I, appears to be the decision of a die engraver. The A-shaped lower element created by the addition of the V shape was evident at both mints early in the reign, but at the main mint was misdrawn with a central line in place of the V shape on some dies of the first phase (F.G1-i), and in the first phase of the subsidiary gold mint (F.G2-i) the tamga retained the curved appendages used in the previous reign. The lower element of the tamga changed into a diamond shape in the third and fourth phases (F.G1-iii and -iv), but with a few dies at the time of the transition between these phases reverting to the A shape. The A shape re-emerged when the transition to Kushano-Sasanian issue began (F.G1-v). From Kanishka II onwards the shape of the tamga was fairly stable, but was often badly executed.

It seems likely that the Kushan tamga in all its forms had the same meaning throughout the dynasty, i.e. as a marker of the Kushan dynasty. Its various forms did not, as some have suggested, assign a single variation to each king (Mukherjee 1978, 26) nor did the various forms represent deliberate indicators of dynastic succession (Bivar 1955), but the variations were intentional or accidental changes made at the mints.

The Kushan tamga also appears a few times on seals. The tamga form used by Wima Kadphises appears on an engraved garnet featuring an elephant with two riders, published by Göbl (1967; pl. 85, no. 1). A tamga of the style used on the coins of Wima Kadphises is featured on an engraved garnet, featuring a horse rider, in the British Museum (**Fig. 2.4**) (Bivar 1968, pl. I, no. 4; Göbl 1967, pl. 85, no. 2), and Huvishka's tamga appears on a clay sealing among the material collected by Masson from Begram (**Fig. 2.5**), and a tamga with an A-shaped base is seen on a seal impression in the name of Kanishka (II or III) featuring a man fighting a horse, in the Ashmolean Museum (Bivar 1968, pl. I, no. 8; Göbl 1967, pl. 85, no. 6; see §G.4 below). The Kidarite tamga is the main design on a lost seal, belonging to Alexander Cunningham (Bivar 1968, pl. I, no. 9; Göbl 1967, pl. 85, no. 16).

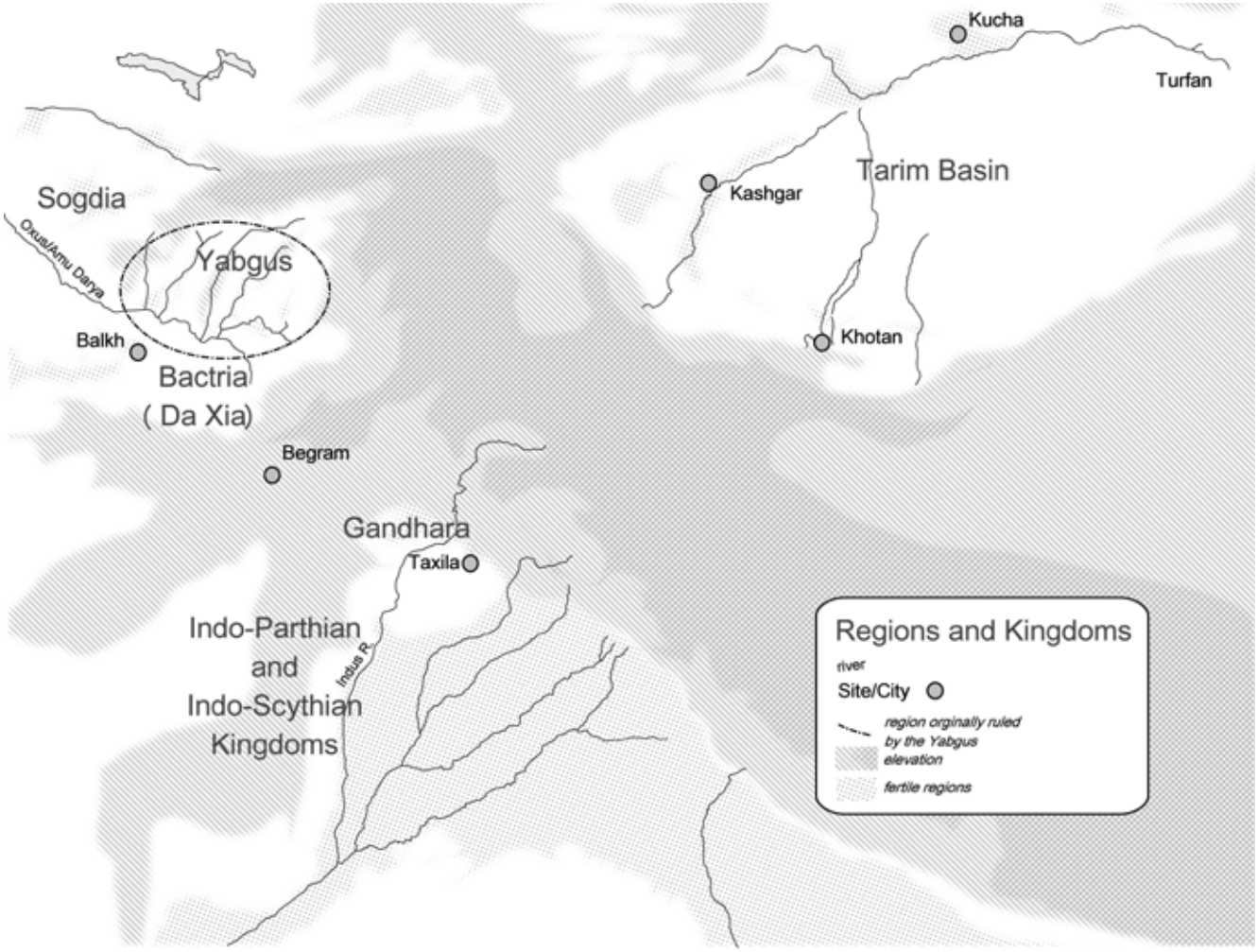


Figure 2.6 Map of Central Asia in the period before the rise to power of Kujula Kadphises

4 The terms Da Yuezhi and Tocharoi in ancient sources

Although Chinese historians were aware of the designation Kushan, the term they used for the Kushan empire was 大月氏 *dayuezhi* (literally 'great moon clan'), because their first knowledge of the Kushan yabgu, i.e. Kujula Kadphises, was in the context of him being a sub-ruler of a former nomad state ruled by a Da Yuezhi king, also referred to as Yuezhi in some contexts. The Chinese also knew of another group called 小月氏 *xiaoyuezhi*, i.e. the Small Yuezhi who they said lived in Qinghai, on the north-eastern corner of the Tibetan plateau (*Shiji* 123.4a: Zürcher 1968, 360; Falk 2015a, 42–3).

An alternative transcription of Da Yuezhi has also been proposed, suggesting that the character 月 *yue* should be read as an alternative form of the character 肉 *rou* or *ru* (used in modern Chinese to mean meat). The alternative reading has been used to reconstruct the name of the Da Yuezhi as the Arsi, as listed among the Central Asian peoples by Pliny the Elder (*Natural History* 6.18.14: Rackham 1942, 372–3) (Dorn'eich 2008). The linkage between the Da Yuezhi and Arsi was already mooted by earlier scholars without this linguistic explanation (Müller 1918, 579; Konow 1929, lxi; Maenchen-Helfen 1945). This reading has also been used to link the Da Yuezhi with ārśi-kāntu, another name of Agnaean, Tocharian A (Tarn 1951, 284; Voynikov 2018, 82–3). The Han period pronunciation of *rou* is Old Chinese *nuk* or Late Han ńuk, and of *ru* is Old Chinese *nukh* and Late Han *ńu* (Schuessler 2009, no. 14-17), which does not include the initial *a* and the *r* sound one would expect to provide the name Arsi. This transcription now regularly appears in non-specialist publications, even though the rendition of Da Yuezhi as Da Rouzhi remains implausible and has been dismissed by Thierry (2005, 447, n. 34). The Han period wooden slips mentioning the Da Yuezhi, all write the name as 大月氏, without any indication that another reading would be plausible (Zhang Defang 2004).

The Kushan yabgu was said by the Chinese 1st-century AD chronicle the *Han Shu* to be one of five yabgus who served as sub-rulers of the Da Yuezhi king in the territory now represented by south-eastern Uzbekistan, western Tajikistan and northern Afghanistan (**Fig. 2.6**) (*Han Shu* 96A.15A–B: Zürcher 1968, 365; Hulsewé and Loewe 1979, 121–3; Falk 2015a, 70–4). This territory was known in western sources as Bactria, its name (Old Persian: *Bāxtriš*) known since it became a province of the Achaemenid empire from the time of Darius as attested in inscriptions of his reign (Lecoq 1997, 130–52, 200–2, 236, 244 and 246), and by Arab historians as Tokharistan (*ṭoḵārestān*). The Chinese seem to also associate it with the name used by the Arabs, as from the 1st century AD they called it Da Xia (大夏 *da xia*), probably pronounced Old Chinese *dâs-grâh* (or *grâ*?), Late Han *dah* (or *das*)-*ga* (Schuessler 2009, nos 21-12, 1-15), or Archaic Chinese *d'âd-g'â*, Middle Chinese *d'âi-ɣa* (Ulving 1997 (after Karlgren 1957), 1034–2444), apparently a

transliteration of the same word as Tochari. Another discovery shows that in the 2nd century AD it already had the name Tokharistan ΤΟΧΟΑΡΣΤΑΝΟ in a Bactrian inscription of the time of the Kushan king Kanishka I (Sims-Williams 2015). The text in which this usage was found implies that Tokharistan was the centre of the empire, the place to which the king returned after a successful campaign into India.

Later Chinese Buddhist texts continue referring to the kingdom ruled by the Kushans as [Da] Yuezhi (Zürcher 1968, 367). The Chinese also refer to the Kushan king Kanishka I's kingdom as Gandhara (Zürcher 1968, 374–84). In one case, however, there appears to be a reference to Kanishka I as king of the Kushan people (拘沙 *jusha*; Late Han *ko-ṣa*, Middle Chinese *kəu-ṣa*: Schuessler 2009, nos 10-1, 18-15) in the work of Kumarajiva (Zürcher 1968, 385). Kumarajiva, however, and other 4th to 5th-century Chinese writers continued to translate Tokharistan, meaning the kingdom, as Yuezhi (Zürcher 1968, 372 and 385; Wan Xiang 2012, 260; Sims-Williams 2002, 230) because, like the Indian sources, they were referring to the location rather than the inhabitants.

Tokharistan also appears to be behind the name *turuṣka* given to the Kushan kings in the Kashmir chronicle *Rājataraṅgiṇī* (1.170, 8.3412: Stein 1900, vol. 1, 31, vol. 2, 268) when referring to Kanishka (*kaniṣka*), Huvishka (*huṣka*) and Vasishka (*juṣka*) as 'descended from the Turuṣka race' (1.168–73: Stein 1900, vol. 1, 31). The people of Tokharistan and an individual are also named *tuhkhara or tukhara* in the *Rājataraṅgiṇī* (4.166, 4.211), but in the post-Kushan period. In India the inhabitants of Tokharistan are also thought by some scholars to be referred to under the names *tuṣara* or *tukhara* in the *Mahabharata* (2.50, 3.51, 3.176, 12.35 and 12.65), *tuṣara* or *tukhara* in the Puranas (*Brahmanda Purana* 27.46–48; *Markandeya Purana* 57.39; *Vayu Purana* 1.58, 78–83; *Matsya Purana* 141.51–58) (Pargiter 1913, xxvi, 44–6 and 72; Narain 1990; Benjamin 2007, 38–40). The uncertainty about the date of the composition of these texts (probably in the Gupta period as the Huns are mentioned) means it is difficult to be certain that this represented the Indian identification of the Kushan kings.

If these Puranic references are to the Kushan dynasty or the people living in the territory they ruled, in the same way as they are in the *Rājataraṅgiṇī*, this cannot be used as evidence that the Kushan kings were Tocharians, because the terminology is used in the same way as in the western reports which identify the people under Kushan rule as Bactrians after their main place of residence, but using the Greek/Latin name for Tokharistan. A Roman report of embassies from the 'kings of the Bactrians' is datable to the reigns of Wima Kadphises or Kanishka I: 'reges Bactrianorum legatos ad eum amicitiae petendae causa supplices miserunt' ('The kings of the Bactrians sent envoys to him [i.e. Hadrian AD 117–38] to beg humbly for his friendship') (*Historia Augusta, Vita Hadriani* 21.14: Magie and Ballou 1922, 66–7) (Falk 2015a, 115); and of Bactrian envoys in the reigns of Kanishka I or Huvishka: 'Quin etiam Indi Bactri Hyrcani legatos misere iustitia tanti imperatoris comperta, quam ornabat vultu serie pulchro, procerus membra, decenter validus' ('Indeed, even Indians, Bactrians, and Hyrcanians sent legations when the justness of so great an emperor [i.e. Antoninus Pius AD 138–61] became known, a justness which he adorned with a serious, handsome countenance, long of limb, suitably robust') (*Epitome de Caesaribus* 15.4: Banchich 2018). The people of the Kushan empire are also identified as Bactrian in the case of the Roman orator Dio Chrysostomus, who referred to members of his audience in Alexandria *c.* AD 105 (i.e. in the reign of Wima Takto) as Bactrian (*Dio Chrysostom* 32.4: Cohoon and Lamar Crosby 1940, 210–11).

There might also be a direct reference to a Kushan emperor in the *Periplus of the Erythraean Sea* (47:16.5–6). This merchants' guide was probably written during the reign of Kujula Kadphises (Casson 1989, 7; Cribb 1998a, 176–7). It referred to the 'warlike Bactrians ruled by their own king' (Casson 1989, 80–1, 204–5). The text which follows the word for king in the original manuscript has caused problems for its editors. The manuscript says: 'καὶ τούτων ἐπάνω μαχιμώτατον ἔθνος βακτιανῶν ὑπο βασιλέα οὖσαν ἴδιον τόπον καὶ ἀλέξανδρος ὁρμηθεὶς ἀπὸ τῶν μερῶν τούτων ἄχρι τοῦ γάγγου διῆλθεν'. Every editor of this text has tried to emend it to make sense of the words 'οὖσαν ἴδιον τόπον', but without complete success (MacDowall and Wilson 1970). Kennedy (1913, 129) suggested that it could be emended by adding κ to the beginning of οὖσαν, making the word κούσαν, i.e. Kushan, and that there was something missing after it, so that the passage 'καὶ τούτων ἐπάνω μαχιμώτατον ἔθνος βακτιανῶν ὑπο βασιλέα κοῦσαν' would be translated as 'and above these [i.e. the Gandharans] is the warlike tribe of Bactrians under king Kushan'. The next words 'ἴδιον τόπον' mean 'own place' and could be referring to the Bactrians or to what follows about Alexander setting out for the Ganges. The emendation by Kennedy was rejected, but MacDowall and Wilson suggested that a name followed βασιλέα. What they did not acknowledge was that Kushan could be used as a name on its own, as it had been used by and for Kujula Kadphises on coins and in inscriptions (see §2 above). The *Periplus* was written (*c.* AD 40–70) during Kujula Kadphises' reign, so the text here seems to use Bactrians to refer to the people of Bactria (either the Tochari or their Da Yuezhi occupiers) and king Kushan to refer to Kujula Kadphises (Falk 2015a, 92).

Classical sources, like the Indian sources, also use the term Tochari (Tocharoi) to designate a people. Ptolemy places the Tocharoi in Bactria, south of the river Oxus/Amudarya (τοχαροι 'a great race below the people who live on the Oxus') and another people called the Tachoroi (ταχοροι) in northern Sogdia on the river Jaxartes/Syr Darya (*Geographia* 6.11–12: Stevenson 1932, 142–3).

Because the Da Yuezhi and Kushans occupied the territory known as Tokharistan, many scholars have equated Ptolemy's Tochari with the Da Yuezhi (Narain 1957, 129–32; 1987; Rapin 2007, 60; Benjamin 2007, 21–2, 41, 187; 2018, 189; Falk 2015a, 48–50, 119; Rezakhani 2017, 52; see also Cunningham 1888, 54 and Bailey 1937). Various etymologies have been proposed for this equation; Pulleyblank suggested that modern Chinese *yuezhi* = early Middle Chinese *ŋuat-tciă* = Tocharian **Ywati* = Greek ἀσιοι/ἀσιανοι, Latin *asii* or Greek ἰατιοι (Pulleyblank 1966, 16–22 and 1995, 425) and Beckwith that modern Chinese *yuezhi* = Old Chinese **Tok*^{w}*ar-*

ke (Beckwith 2009, 380–3). The connection, however, remains very unclear between the name Tokhar[istan], 大夏 Da Xia, pronounced *dah-ga* in Han period Chinese, or in the Tang period 土豁羅 *tu huo luo* (*Xin Tang Shu* 221B: 146.24 at https://ctext.org/wiki.pl?if=gb&res=182378) pronounced *tʰa-huai-la* (Schuessler 2009, nos 1-36, 22-1, 18-10), and the Han period Chinese pronunciation of the name Da Yuezhi 大月氏 *dah-ŋyat-tśe* (Schuessler 2009, nos 21-12, 22-8, 7–6). Other scholars have argued against this linkage (Enoki *et al.* 1994, 173; Liu Xinru 2001, 265–6; Dorn'eich 2008, 72, 77; Mallory 2015), arguing that the Chinese account of the Da Yuezhi conquering Da Xia means that the Da Yuezhi cannot be equated with Da Xia, because it is a Chinese transcription of Tochari. Most of the arguments equating the Da Yuezhi and Tocharians have been listed and analysed by Mallory (2015, 11–16) and by Dorn'eich as a historiographical phenomenon (2008, 29–72).

Some researchers have argued that the Kushan and other yabgus were not part of the Da Yuezhi but local Bactrian/Tocharian princes who were subject to the Da Yuezhi (Yu Taishan 2011; 2014, 387–8; Puri 1965, 1–8). There are two conflicting explanations of the title yabgu: either that it is a title 翕侯 or 翎侯 *xihou* ('harmonious noble' or 'allied noble') bestowed by the Chinese on high nobles of the nomad peoples who were allied to them (Cribb 2018b) or that it is a title adopted from an Inner Asian language, transcribed by the Chinese so that it corresponded with the Chinese feudal title 侯 *hou* (a landed noble, normally translated as 'marquis') (de la Vaissière and Sims-Williams 2012). Whatever the significance of the title, its usage in early Chinese texts relating to the nomad peoples of Inner Asia suggests that it was held by members of the aristocracy close to the nomad ruler (Cribb 2018b, 2–3). The usage of the title yabgu suggests that the Da Yuezhi king appointed leading members of his court, perhaps even members of his family, to administer parts of the territory of Da Xia which he had conquered.

The coins and official inscriptions of the Kushan kings show them identifying themselves as Iranian, using an eastern Iranian language, known to modern scholars as Bactrian and called APIA (Aryan) in Kanishka's Rabatak inscription (Sims-Williams 2004, line 3), dressing in Iranian clothes (Rosenfield 1967, 164–5) and worshipping Iranian gods (Cribb 2008; Grenet 2015). If that were the only evidence then they would be identified simply as eastern Iranian. The Chinese account of the Da Yuezhi migrating from western China has led many scholars to identify the Da Yuezhi and the Kushans with the Tochari (Rapin 2007, 59–61; Falk 2015a, 48–50) and even with the peoples who spoke the languages now known to scholars as Tocharian (Benjamin 2007, 44; 2018, 189). A further piece of evidence is the personal names of the Kushan kings, which are definitely not Bactrian, nor Tocharian, but show some connections to both. Sims-Williams (2002, 239) suggests that the Kushan royal names show they were derived from an 'otherwise unattested Iranian language', because of their connection with Bactrian, Sogdian and Khotanese, all eastern Iranian languages, and that such a language could be related to Scythian (*ibid.*, 240). The identity of the Kushan kings as inheritors of aspects of Scythian culture does not necessarily mean that the Da Yuezhi were Scythian, as we do not have similar evidence for the Da Yuezhi kings or their other yabgu. This does not allow us to be categorical about the whole of the peoples identified in the Chinese sources as [Da] Yuezhi, as there were likely to be a mixing of identities and ethnicities in the formation of such nomadic states. As they moved into Da Xia and then south of the Hindu Kush, the Da Yuezhi and their Kushan kings were perceived by outsiders to continue to maintain a distinct identity from the peoples they conquered.

The Scythian, i.e. eastern Iranian heritage, of the Kushan kings, evident in their names, also gives an explanation for their ready deployment of eastern Iranian religious and visual identity, and their use of the eastern Iranian Bactrian language in official contexts (i.e. in coin and state inscriptions).

A further aspect of the Chinese account of the Da Yuezhi and Da Xia also needs to be considered in relation to their identity, as it is clear from the *Shiji* (123: Zürcher 1968, 360) account by the Chinese emissary Zhang Qian that the Chinese considered the Da Yuezhi and Da Xia to be two distinct entities. When the Chinese emissary Zhang Qian encountered the Da Yuezhi king in 128–127 BC the Da Yuezhi had already migrated as far as the river Oxus valley and he reported that they had forced Da Xia to recognise their sovereignty (Yu Taishan 2014, 12–14; Watson 1971, vol. 2, 265) and described passing from the [Da] Yuezhi to Da Xia. He also described Da Yuezhi and Da Xia as two of the four countries he had personally visited and in his reports he described the Da Yuezhi being north and Da Xia being south of the river Oxus/Amudarya (Watson 1971, vol. 2, 267; Yu Taishan 2014, 17, 23). He described the Da Yuezhi as nomads who moved with their herds, and a warrior nation, but Da Xia as (like the Da Yuan) settled and cultivating the land, having cities and houses, merchants with no use for arms and afraid of battle (Watson 1971, vol. 2, 267–9; Yu Taishan 2014, 23, 28–9). On his journey back to China from the west Zhang Qian spent time with the Wusun, another nomad people in Inner Asia and, from there, sent envoys back to both the Da Yuezhi and to Da Xia (Watson 1971, vol. 2, 273; Yu Taishan 2014, 44). Similar accounts in the *Han Shu* (96A.15A and 61.5B; Hulsewé and Loewe 1979, 120–1 and 218) reinforce the distinctions, probably from the same original sources as the account in the *Shiji*.

If Da Xia was a transliteration of Tochari, then the Da Yuezhi were seen by the Chinese as a separate entity from the Tochari, and so unlikely to be Tochari or speak a 'Tocharian' language. The Kushan state seems therefore to have been referred to by foreigners as Tocharians or Bactrian because of its location, rather than as an expression of the identity of the Kushan kings. A useful parallel would be the use by its Danish and Norman conquerors of the names of England and the English, a term based on the Angles, one of the Germanic peoples who had earlier invaded part of Britain. The Danish conqueror of England, Cnut (AD 1016–35) used the titles *rex Anglorum* in Latin and *Englalandes cininge* in Anglo-Saxon (Beech 2009, 28–9) and William I the Norman conqueror adopted the Latin title *rex Anglorum* from his coronation in 1066 and his successors adopted the title *rex Angliae* (Hollister 1976).

If the Da Yuezhi and the Kushans were not Tocharian, then references in two Latin sources, by the Roman historians Ammianus Marcellinus and Pompeius Trogus, can be interpreted as relating to the Da Yuezhi as the rulers of the Tocharians. Ammianus writing in the 4th century AD seems to be referring to the kings of the Bactrians in ancient times as 'warlike and powerful and overlords of many peoples, particularly dominating the Tocharians' ('Bactriani, natio antehac bellatrix et potentissima, … Gentes isdem Bactrianis oboediunt plures, quas exsuperant Tochari') (Ammianus Marcellinus, *Rerum Gestarum* 23.6, 55–7: Rolfe 1940, 380–1; Falk 2015a, 120 and 133).

Ammianus is perhaps echoing the lost account of Parthian and Bactrian history written in the 1st century BC by Trogus, preserved in summary in the prologue to book 42 of his Philippic History (*Prologues to Philippic History* 42: Yardley 1994, 285), which includes what appears to be a similar statement: 'the Asiani kings of the Tocharians' ('reges Tocharorum Asiani'). This cryptic phrase could be interpreted in various ways (Benjamin 2007, 185), but could identify the Asiani as the Da Yuezhi. Attempts to equate Asiani with Kushans (Cunningham 1889, 268; Eggermont 1968, 100) and Tochari as the Da Yuezhi in this text ignore the date at which Trogus wrote, i.e. more than 50 years before the Kushan yabgu Kujula Kadphises became hegemon of the Da Yuezhi.

The Asiani are also identified as the conquerors of Greek Bactria together with the Saraucae in Trogus' *Prologues* (41: Yardley 1994, 284–5). The Asiani and Tocharians also appear together, in another Classical source, among the nomads who overthrew Greek rule in Bactria. Strabo, writing in Greek in the late 1st century BC to early 1st century AD, listed these peoples as the Asii, Pasiani, Tochari and Sacarauli:

> μάλιστα δὲγνώριμοι γεγόνασι τῶν νομάδων οἱ τοὺς Ἕλληνας ἀφελόμενοι τὴν Βακτριανήν, Ἄσιοι καὶ Πασιανοὶ καὶ Τόχαροι καὶ Σακάραυλοι, ὁρμηθέντες ἀπὸ τῆς περαίαστοῦ Ἰαξάρτου … ('But the best known of the nomads are those who took away Bactriana from the Greeks, I mean the Asii, Pasiani, Tochari, and Sacarauli, who originally came from the country on the other side of the Iaxartes River …') (Strabo, *Geographia* 11.8.2: Jones 1928, 261–2).

The implications of these Classical sources are that the Asii were nomad invaders of the territory previously forming the Greek kingdom of Bactria, but eventually ruled the territory of the Tochari, the situation described by Zhang Qian of the Da Yuezhi subordinating Da Xia. But the identification of Da Xia with the Tochari suggests that this people had already settled in Bactria well before the Da Yuezhi conquered it.

The use of such a wide variety of terms: Bactrians, Tocharians, Da Yuezhi, Asiani, Kushan, apparently to indicate the same political entity, and that different ancient sources treat the same terms as names, ethnicities, places, or states, indicates the complexity of the identities involved. The political identity, essentially east Iranian, presented by the Kushan dynasty in its surviving material culture and language is clear, but these manifestations, from which the political administration of the dynasty is constructed, are the only part of the story to survive. Undoubtedly members of the Kushan dynasty itself had a personal identity, but the degree to which it informed our various sources, or the degree to which the sources imposed their own ideas of identity in order to render their accounts intelligible, are essentially unknowable. Attempts to reconstruct a 'reality' behind these various presentations of identity are essentially futile, and potentially dangerous (Ch. 1 §3.4). For our purposes it is enough to note that ancient sources might in using any of these terms indicate what we think of as the Kushan state but none of them mean by their use exactly the same thing we intend; they are not perfect synonyms.

5 The origin of the Kushan empire

The Kushan empire's origins and growth can be reconstructed from Chinese historical accounts and through the distribution of the production and circulation of their coins. The production of coins identifies the cities where they ruled and in some instances the circulation of the coins can also be an indicator of the territories they controlled. The location of inscriptions naming the kings can also give such indications. There are, however, instances when Kushan coins and Kushan kings' names were used outside the empire, so the circumstances of their use need to be taken into account.

The Chinese chronicle *Hou Han Shu* (118.9a) gives a brief account of the establishment of the Kushan state by the Kushan yabgu Kujula Kadphises, his conquests and adoption of the title Kushan king, and also describes the activities of his son Wima Takto.

The first mention of Kushan in Chinese sources is in the list of yabgus ruling Da Xia on behalf of the Da Yuezhi king in the *Han Shu* (96A.15A; Hulsewé and Loewe 1979, 120–1). The Kushan yabgu 貴霜翕[or 翎]侯 (*guishuang xihou*) is listed as one of five sub-rulers of the Da Yuezhi controlling Da Xia (Cribb 2018b; Falk 2015a, 67–78). The *Han Shu* was completed during the 1st century AD, and was intended to cover the period down to the death of the usurper Wang Mang in AD 23, so its information depended on the *Shiji*, compiled before *c.* 90 BC, and on other sources created after that text's completion, but no longer surviving. There is no mention of the Kushan yabgu or their rule over Da Xia in the *Shiji* (123: Zürcher 1968, 360), but only the establishment of the Da Yuezhi north of the river Oxus/Amudarya and their subjugation of Da Xia, south of the river. The *Shiji* records the information available to its author Sima Qian before he died *c.* 86 BC, and its account of the Da Yuezhi is largely based on the reports of the Chinese emissary Zhang Qian who visited them *c.* 128–127 BC. The *Han Shu* account of the Kushan (96A.15A–B) and other yabgus includes details relating to their distance from the headquarters of the Chinese Protector General of the western regions, an office active between 59 BC and AD 23 (Hulsewé and Loewe 1979, 64). The existence of the yabgus during this period is also evidenced by Chinese wooden documents found at Xuanquanzhi in western China which mention envoys of the Da Yuezhi Shuangmi yabgu in 43 BC and of the Da Yuezhi Xiumi yabgu in 37 BC (Zhang Defang 2004, 136–7; Grenet 2006; Hill 2009, 589; Falk 2015a, 68–9). The five yabgus are also featured in the *Hou Han Shu*, written in the 5th century, but making use of the report compiled in AD 125 by the Chinese general Ban Yong, who was the main

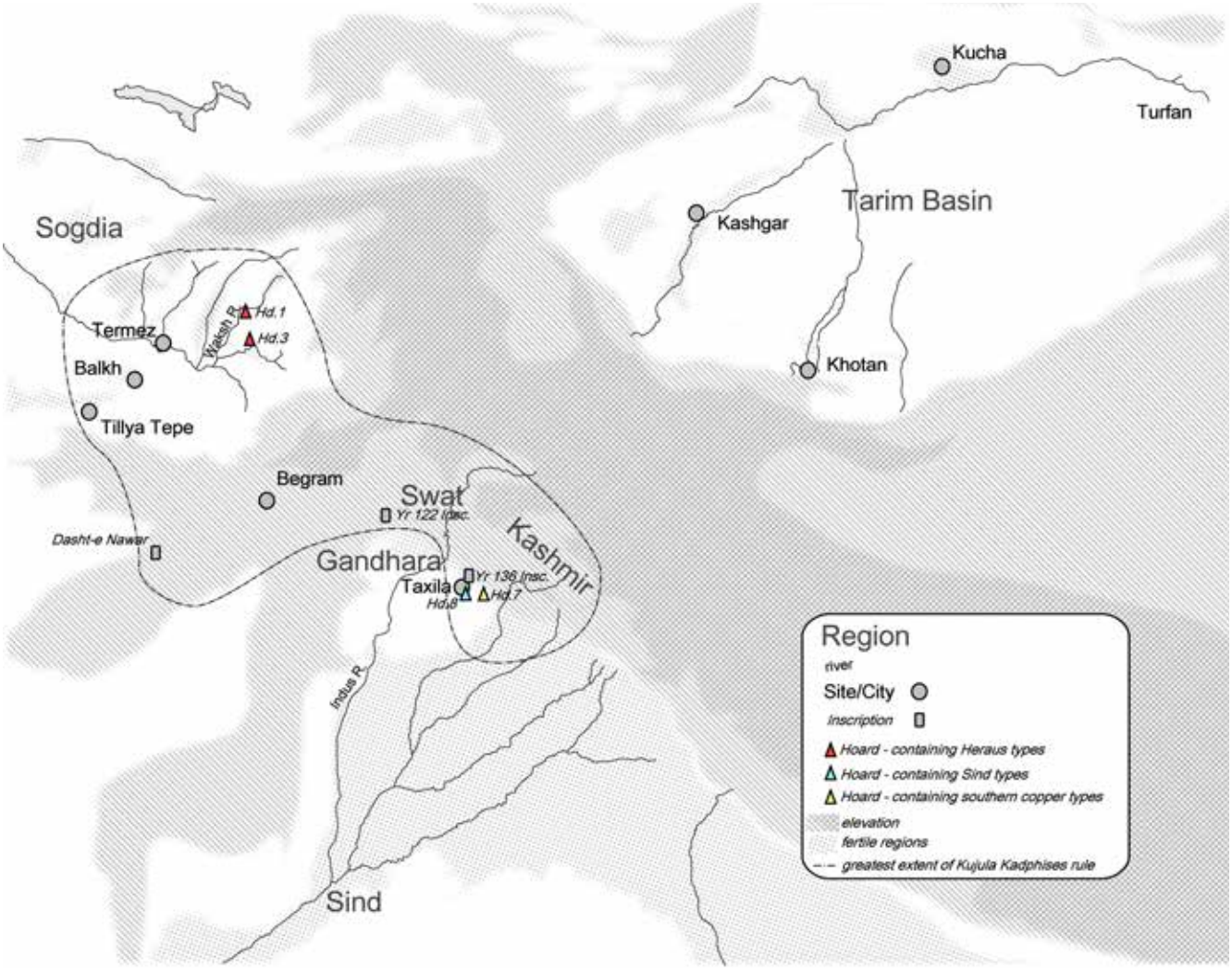


Figure 2.7 Map showing territories under the control of Kujula Kadphises

agent of Chinese activities in Inner Asia during the period from AD 123–7 (*Hou Han Shu* 118.2; Zürcher 1968, 349–50; Hill 2009, 12–13). Ban Yong's report also contained information gathered by his father Ban Chao, general of Chinese forces in the region *c.* AD 74–102. Ban Chao had direct contacts with the Kushan state, both friendly and hostile, so his information would have come from such contacts and that probably included the *Hou Han Shu* account of the foundation of the Kushan state.

The *Hou Han Shu* (118.9a: Zürcher 1968, 367; Thierry 2005, 475, 492–3; Hill 2009, 28–9; Yu Taishan 2014, 386–7; Falk 2015a, 85–8) states that the Kushan yabgu Kujula Kadphises, called 丘就卻 *qiu jiu que* (see §A.4 below) in the Chinese text, came to power, having destroyed (the Chinese text says 'attacked (*gong* 攻) and extinguished (*mie* 滅)') the other four yabgus, more than a hundred years after the yabgus were placed in control of Da Xia. If as demonstrated here Kujula Kadphises' reign began *c.* AD 50, then the beginning of yabgu rule in Da Xia began before *c.* 50 BC. Falk (2015a, 69) places this beginning after *c.* 80 BC and Thierry (2005, 478) after *c.* 70 BC. So it seems possible that 'Kushan' began life as the designation of a high-ranking Da Yuezhi noble by the mid-1st century BC, but only came to represent the name of the rulers of an independent state once the Kushan yabgu Kujula Kadphises destroyed the other yabgus and began his campaign of conquest.

The account of the yabgus in the *Han Shu* describes their locations, by naming the towns from which they rule. The location of these towns has provoked much scholarly debate (as discussed by Hill 2009, 319–45; Falk 2015a, 68–78; Grenet 2006). The text also describes the distances of these towns from the Chinese Protector General's headquarters at Wulei (*Han Shu* 96B.9B). Attempts to make sense of these distances create many problems and other explanations have been suggested (most recently Falk 2018). They are expressed in *li*, the Chinese mile (*c.* 416 metres), so the distances can be turned accurately into kilometres or miles. Measured on the ground the furthest town is about 1350km further than the nearest, which would locate it in Pakistan or Iran (**Fig. 2.7**). It seems likely that the actual distances were not measured, but rather estimated by the amount of time taken over very varying terrain. It therefore becomes very difficult to use the measurements without already knowing their locations and the routes taken. The recorded distances are difficult to reconcile with the various locations suggested by scholars, without emendments which seem to be used to match the distance to the location identified. The only agreements about locations seem to be placing the town of the Dumi yabgu in Termez and the Kushan yabgu in the lower Wakhsh valley. The numismatic evidence of the distribution of Kujula Kadphises' 'Heraus'-type coinage in the Wakhsh valley supports the location of the origins of the Kushans in

this region. The attribution of the 'Heraus' coinage to the reign of Kujula Kadphises is confirmed by its numismatic context (see commentary in Ch. 3 §A.2).

The analysis of the locations by Grenet (2006) best fits the historical sources locating the Da Yuezhi north of the river Oxus/Amudarya. According to his arrangement the yabgus are all located in the valleys north of the river, so that their control of regions in Da Xia, i.e. south of the river, would be from their bases in Da Yuezhi territory. Such an arrangement also makes most sense of the distribution of imitation Bactrian Greek coins in these valleys, rather than in the regions south of the river (Staviskii 1986, 127–40, fig. 12; information supplemented by Aleksey Gorin's maps in Falk 2015a, 75–7, figs 2–4).

Kujula Kadphises' rise to power by destroying the other four yabgus, as reported in the *Hou Han Shu*, was followed by an extended campaign of conquest. The Chinese source lists the kingdoms he attacked: 'he invaded *Anxi* [安息 Old Chinese *?ân-sək*, Late Han *?an-sɨk*: Schuessler 2009, no. 24-11, 5-29], captured the *Gaofu* region [高附 Old Chinese *kâu-boh*, Late Han *kau-buo*: *ibid*., 16-1, 10-39], and destroyed *Puda* [濮達 Old Chinese *phôk-dât*(or *thât*), Late Han *pʰok-dat*(or *tʰat*): *ibid*., 11–23, 21–14] and *Jibin* [罽賓 Old Chinese *kats-pin*, Late Han *kɨ*as-*pin*: *ibid*., 21-5B, 32-38], taking possession of their kingdoms'. The interpretation of these place names has again been problematic. Yu Taishan (2014, 389) identified Anxi as the Indo-Parthians, Gaofu as Kophen, i.e. the Kabul river region, Puda as Bactria, and Jibin as Gandhara and Taxila. Thierry (2005, 475–9, 492–3) also identified Anxi as the Indo-Parthians, Gaofu as the Kabul region, but Puda as Gandhara (Pushkalavati) and Jibin as Kashmir. Hill (2009, 350–1) again identified Anxi as the Indo-Parthians and Gaofu as Kabul, but Puda he identified as Paktia (near Gardez), south of Kabul, and Jibin as Kapisa (Begram) and Gandhara (including Chitral, Kunar valley and Swat) (see also Hill 2009, 489–505). Realistic arguments are presented for all these identifications, but problems can be raised with all of them. Bactria, for example, sits oddly in this list of conquests, as it should be under the control of one of the other yabgus, so should already have been annexed when the other four yabgus were destroyed. Anxi is described as to the west of [Da] Yuezhi in the *Han Shu* (96A.14B; Hulsewé and Loewe 1979, 118), not to the south and south-east where the Indo-Parthians ruled. Grenet (2006; see also Falk 2015a, 78) argued that Gaofu could be another name for the Termez region, so identifying it as Kabul becomes problematic. In the *Hou Han Shu* (118.9a), however, Gaofu is described as south-west of the Da Yuezhi and in such a way that it seems to be the Kabul region, and is said to have been ruled in the past by Anxi. This could refer to the Indo-Parthians, but it could equally be a reference to Achaemenid rule in the area, as one of the other kingdoms, said by the *Hou Han Shu* to have ruled it, is Tiandu, i.e. India, and Indian rule in the Kabul region dates back to the Mauryan period before *c.* 180 BC, from Chandragupta's treaty with Seleucus, *c.* 303 BC until the invasion of the Bactrian Greeks, so also talking about the distant past. Perhaps the Chinese account of Gaofu is confusing two places and although parts of the description fit the Kabul valley region, it cannot be said that all references to Gaofu relate to that area, and Grenet's identification of Gaofu as the Termez region might in fact be plausible. The *Hou Han Shu*'s correction (118.9a) of the *Han Shu*'s identification of Gaofu as one of the Da Yuezhi yabgu's domains (96A.16b) reflects the lack of clarity. Jibin, likewise, presents some confusion as it seems to be used in Chinese sources to refer to both Kapisa and Kashmir so also cannot be identified with precision from this account. Kujula Kadphises' conquests were clearly extensive, but the *Hou Han Shu* does not give us sufficient clarity to locate them.

Although the Chinese texts concerning Kujula Kadphises and in a lesser way his successors give information compiled close in time to their activities, they are mediated through the Chinese language which makes it difficult to be confident of the identification of locations (Thierry 2005, 437–42), even when transcribed into the Chinese pronunciation of the period (*ibid*., 442–6), and most of them were written long after the events they described by people who had no personal knowledge of the regions described. A better understanding of them can be created through the use of the other contemporary records of the Kushan kings available from their coins and inscriptions naming them. A different approach to understanding Kujula Kadphises' conquests is to map the finds of his coins, particularly where they were being made (see next section), and to locate his inscriptions.

6 Kushan kings

A.1 Kujula Kadphises, c. AD 50–90: historical account

Kujula Kadphises is the most extensively documented Kushan king in historical sources because of the paragraph in the *Hou Han Shu* (118.9a–b) describing his rise to power and his conquests (see §5 above). The only other personal information about him in the Chinese source is his death aged over 80 and his succession by his son *yangaozhen*, whose name is confirmed as Wima Takto by the Rabatak inscription. Another son Sadaṣkaṇa is known from the inscription of Senavarma, king of Odi (Baums 2012, 227–33, no. 24), unless they are the same person under different names.

Because of the chronology proposed here, other events described in the *Hou Han Shu* (77.4a, 77.6b, 7a, 3.17a, 4.3b; Zürcher 1968, 369–71; Thierry 2005, 480–2) can be recognised as happening during his reign. They describe diplomatic and military contacts between the Chinese general Ban Chao and the [Da] Yuezhi, i.e. the Kushan king Kujula Kadphises: in AD 78 Ban Chao sought imperial approval for his plan to create military alliances with the Yuezhi and others to defeat Kuche. In AD 88 he acknowledged that the Yuezhi had helped him in an attack on Turfan, and that they were sending tribute (jewels, lions and antelopes) to the Chinese court, but he prevented them from going to China as they were also asking for a Chinese princess. He reported that this caused offence and in AD 90 a Yuezhi army led by an assistant king 副王(*fuwang*) called Xie (*xie* 謝, Old Chinese *s-lakh*, Later Han *za*: Schuessler 2009, no. 2-26) started attacking China's allies in the area. Schuessler (2009, no. 71) suggests that *xie* may be a transcription of *ṣāhi* (i.e. Bactrian ÞAO). Thierry (2005, 481)

Figure 2.8 Copper drachm of Gurgamoya, king of Khotan, *c.* AD 60–80, overstruck on imitation Hermaeus coin (BM 1902,0608.26, 20mm, 4.91g; Cribb 1984b, type 6).
Khotanese coins of this period feature a horse surrounded by a Kharoshthi script Gandhari inscription giving the king's name and titles in the style used in the period of Kujula Kadphises and Chinese inscriptions giving the denomination by weight, 六銖錢 *liuzhuqian*, six zhu coin

Figure 2.9 Base silver tetradrachm of Indo-Parthian king Sasan, *c.* AD 60–90, of the type overstruck by Soter Megas coins of Wima Takto (1894,0506.1599, 21mm, 9.67g; Senior 2001, type 242).
This type was also overstruck by coins of Mujatria (Fig. 2.2)

and Falk (2015a, 100) suggested that *fuwang* could imply that Xie was the heir apparent, therefore Wima Takto. Ban Chao claimed to have out-manoeuvred the Yuezhi viceroy and forced him to withdraw from the region. This appears to be in the last year of Kujula Kadphises reign. The *Hou Han Shu* (77.7a) says that from this time the Yuezhi submitted and sent tribute to the Chinese court every year.

The presence of Kujula Kadphises' influence in Xinjiang can also be seen in the choice of coin designs by the kings of Khotan. As well as using Kharoshthi in an identical style to that appearing on Kujula Kadphises' coins, the Khotanese coins used representations of a horse, based on his 'Heraus' coinage, and a camel, based on his Kashmir issues (Cribb 1984b, 142). There are also examples of Khotanese coins being made by overstriking imitation Hermaeus coins of the series only current at Begram (A.C7A-ii) during Kujula Kadphises' reign (*ibid.*, 147–9). The publication of Khotanese Sino-Kharoshthi coins (**Fig. 2.8**) collected from a recently discovered hoard (Dai Jianbing 2015; Zhou Ti 2018) includes many more of these overstrikes, suggesting the large-scale movement of these coins from Begram to Khotan, perhaps after they were taken out of circulation when the Soter Megas coinage was introduced. Among these overstrikes there was a piece overstruck on a coin issued in the name of Kujula Kadphises (A.C5), perhaps included in a consignment of the imitation Hermaeus coins being gathered up in Begram (Zhou Ti 2018, 163, no. 41; Cribb in preparation). This is additional evidence to suggest that the imitation Hermaeus coins were current in the reign of Kujula Kadphises (see Ch. 3 §A.4).

By the end of Kujula Kadphises' reign the Kushan empire had been established and coin production and coin finds suggest that it controlled large areas north and south of the Hindu Kush, from modern south-eastern Uzbekistan and south-western Tajikistan in the north to northern Pakistan and Kashmir in the south. The inscriptions of Azes years 122 and 136 (Skinner 2 and 4; CKI 60 and 59), referring to a ruler called 'Kushan' can be attributed to the reign of Kujula Kadphises, so indicate his presence to the east of Gandhara in the period AD 76–90, confirming his control of the Taxila region. The large number of the Indo-Parthian king Sasan's coins found in the excavations at Taxila, however, suggest that at the end of Kujula Kadphises' reign Taxila was lost to the Indo-Parthians (**Fig. 2.9**). MacDowall (2007b, 108–9) attributed the year 122 and 136 inscriptions to the issuer of the Soter Megas coinage on the basis of their lack of name, but was unaware of the year 126 inscription of the reign of the yabgu (Baums 2012, 235–6), i.e. Kujula Kadphises, the only Kushan ruler to use this title in Taxila (on his coins) (Cribb 2018b, 11–12).

The conquests of Kujula Kadphises and his son Wima Takto (see §B.1 below) as described in the *Hou Han Shu* are reflected in the coinages they issued. The main centres of coin production under Kujula Kadphises are in two locations in the Da Yuezhi territory north of the river Oxus/Amudarya and three locations south of the Hindu Kush. The first is in the lower Wakhsh valley (in south-eastern Tajikistan) which appears to be the territory directly under Kujula Kadphises' rule as Kushan yabgu; the second is in the lower Kafirnigan valley, centred around the former Dumi yabgu's base at Termez (in south-eastern Uzbekistan). These represent the establishment of Kushan rule over the other yabgu. The three centres south of the Hindu Kush reflect the extent of his conquests. The most prolific are represented by the coin finds from Begram, from the coins collected by Charles Masson (Errington 2017a, vol. 2, 80–1) and the coins found during the excavations at Taxila (Marshall 1951; Khan and Cribb 2012). It seems likely that there were mints established in these cities by Kujula Kadphises' administration after these territories were added to his conquests. The third centre of production is Kashmir; the exact location is not known, but is represented by a large series of coins. Two smaller centres are of unknown location, but finds suggest one may be in Hazara District, to the north of Taxila, and the other in Sind. The coins issued at Begram and Taxila use the same designs and are part of the same denomination system, copper coins based on a gradually descending Indo-Greek weight standard, featuring a tetradrachm, dropping from *c.* 9g.

Any reconstruction is tentative but the coins suggest a physical disconnect in the military conquests that led to the expansion of Kujula Kadphises' rule south of the Hindu Kush. The coinage of the Wakhsh valley, the original centre of Kushan power, must be the earliest, and the Kashmir coinage shows the closest connection to this despite being at the greatest distance. The coinage of Taxila appears to

begin later than that of Begram, but the Sind issues are hard to date relative to the others. The coins issued in Sind are based on coins of the Indo-Parthians ruling in that area, and it can be tentatively suggested that they interrupt that series rather than replacing it. This suggests a brief period in which the administration of that region acknowledged the Kushan ruler. Kujula Kadphises' coins from his Taxila issues are also found in Swat, and it is suggested by a Buddhist inscription that the local Odi kings of Swat were vassals of the Kushan king (Baums 2012, 227–33, no. 24; Skinner 5; CKI 249). If the Sadaṣkaṇa, son of the Kushan king of kings Kujula Kadphises, honoured by Senavarma, king of Odi, is the crown prince and distinct from Wima Takto, Kushan hegemony over them, or alliance with, is likely earlier than later in Kujula Kadphises' reign. In any case no coinage was issued from Gandhara, where Indo-Parthian coinage, and presumably rule, continued, physically dividing the northern Kushan holdings from the southern, and both from Kujula Kadphises' allies in Swat, if that is indeed where the kings of Odi ruled.

As the Chinese sources suggest that the Kushans conquered these regions through military force, and acquiring such a vast area through negotiation strains credibility, it needs to be asked if a Kushan army could have marched through Gandhara freely, and why it would leave the Indo-Parthians unmolested if it could? There are a number of alternative routes, perhaps through the Kunar or Panjir valleys into the upper Indus, from which Kashmir is easily reached, or through the Broghil pass, via Gilgit. To modern eyes the mountains seem formidable barriers, but the Kushan interventions in the Tarim Basin in AD 88 to 90, and suggestions of military aid from these locations to the Kushans in Kanishka's reign (see §D.1 below), demonstrate that armies of the period could and did project military force through them.

Unfortunately, the reality is that not only do we understand nothing of the details of any of these campaigns but that almost nothing is known about the size, composition, or logistical needs of armies in this period. Military historiography for Central Asia between Alexander's campaigns and the arrival of Arab armies is slight (Nikonorov 1997), and that for South Asia non-existent. Without that data, attempts to speculate on particular campaigns often owes more to the logic of Hollywood films and their focus on decisive field battles (Bakker 2017) than the raids, sieges, shifting political allegiances, and relative manpower which likely decided actual conflicts.

At Begram his final issues, the anonymous Soter Megas coins, used the imperial title in Greek, ΒΑΣΙΛΕΥΣ ΒΑΣΙΛΕΩΝ (king of kings), and his son continued the usage when he continued the anonymous coinage, on one coin in Gandhari as well as Greek.

The distribution of Kujula Kadphises' coins, primarily in Begram, Taxila and Kashmir (see **Fig. 2.7**), suggests that the Chinese names of his conquests should reflect that distribution: Gaofu as the Kabul region (i.e. Begram) and Jibin as either Taxila or Kashmir, but it is difficult to understand Puda as Gandhara while it was held by the Indo-Parthians. Perhaps the Chinese text is mistaken and including Gandhara because it was later captured from the Indo-Parthian king Sasan by Wima Takto. The direct imitation and overstriking of Sasan's Gandharan coins by Wima Takto places this Indo-Parthian king in Gandhara before Wima Takto's conquest. The many coins of Sasan found in the Taxila excavations suggest that he held the city in between Kujula Kadphises' occupation and Wima Takto's defeat of Sasan.

The location of three of the four inscriptions which mention Kujula Kadphises by name or title all seem to relate to his control of Taxila (Skinner 4; CKI 60) and eastern Gandhara (Skinner 2; CKI 59), and subordination of Swat, i.e. the kingdom of Swat (Skinner 5; CKI 249).

A.2 Kujula Kadphises: problems of chronology

The earliest inscriptions, relating to Kujula Kadphises, the first Kushan king, appear to be dated in the Azes era, which features in the inscriptions of local rulers in northern Pakistan before and during his reign. Inscriptions of the next two kings are dated in the Greek era, which was used in the same area as the Azes era, as well as in Afghanistan. In one inscription published in 2005, the Azes and Greek eras (Salomon 2005; Baums 2012, 212–13, no. 13) were used together so our understanding of their relationship is assured. This new discovery allowed the relationship between the inscriptions of Kujula Kadphises in the Azes era and those of his immediate successors in the Greek era to be linked into a single system running in the Azes era from years 122 to 171, and in the Greek era from years 250 to 299 (Cribb 2005a, 213–14; 2018a, 14).

Before this inscription was found it was assumed that the Azes era coincided with the Indian Vikrama era with a first year in 58/57 BC, therefore the first year of the Greek era was assumed to be in *c.* 186/5 (Marshall 1914, 997; Salomon 2005). As the association of the Azes era with the Vikrama era was entirely without evidence and merely based on rough coincidence, it was soon suggested that the dating of both eras needed to be re-examined in relation to other inscriptions which seemed to be in the Greek era, which suggested that the Azes era's first year should be *c.* 46 BC (Cribb 2005a; 2015). A few years later a further refinement was proposed by Falk and Bennett (2009), suggesting that the Azes era related to an Iranian dating system and its first year was *c.* 47 BC. As a working basis, dating the Azes era's first year to 46 or 47 BC allows a more logical understanding of the chronology (Cribb 2018a; Falk and Bennett 2009), but these dates remain hypothetical. As Marshall said, 'it is quite possible that the era of Azes will be found to have commenced a few years earlier or later' (Marshall 1914, 977).

Using 46 BC as the first year of the Azes era, the inscriptions referring to Kujula Kadphises as Kushan or yabgu place him in the Taxila region from AD 76 to 90. The earliest dated inscription of his son Wima Takto was written in AD 96 (**Table 2.4**). These dates are compatible with the account in the *Hou Han Shu*, which describes the completed reign of Kujula Kadphises and actions during the reign of Wima Takto in a report made in AD 125 by the Chinese general Ban Yong, but probably only containing information gathered by his father Ban Chao down to AD 102 (see §5 above). The earliest and latest dates from inscriptions cannot

	Dated inscriptions	Skinner/ Shrava nos	Rabatak king list	AD dates based on Kanishka I year 1 = AD 127
Kujula Kadphises	Azes era 122 [Greek era 250] Azes era 126 [Greek era 254] Azes era 136 [Greek era 264]	Skinner 2 Skinner 3 Skinner 4	Great-grandfather of Kanishka I	76 80 90
Wima Takto	Greek era 270 [Azes era 142] Greek era 279 [Azes era 151]	Shrava 166 Skinner 6	Grandfather of Kanishka I	96 105

Table 2.4 Dates of Kujula Kadphises and Wima Takto known from inscriptions

be seen as articulating beginnings and endings of reigns, as we are largely dependent on the chance survival of private inscriptions which used the reckoning. It can only be said that Kujula Kadphises had taken control of the Taxila region by *c.* AD 76 and that he was succeeded by his son before AD 96.

If the Khotanese camel coins copying Kujula Kadphises' Kashmir issues (A.C6-ii) were issued in Khotan between AD 60 and 73 (Cribb 1984b, 139; 1985d, 137), then the initiation of his Kashmir coinage can be dated to before AD 73, and accordingly the 'Heraus'-type first issue of Kashmir (A.C6-i) and the start of its Wakhsh valley prototype (A.S2-i) to before that. It is on the basis of this evidence that the date *c.* AD 50–90 is used for the reign of Kujula Kadphises in this publication.

A.3 Kujula Kadphises: royal images

Representations of Kujula Kadphises on his coins show him wearing the same nomad riding leggings and cross-lapelled jacket as worn by the Parthian kings (Curtis 1998) and by other Central Asian peoples (Ilyasov and Rusanov 1997–8; Brentjes 1989). On one type he is shown in plate-mail armour (A.C6-i). On most coins he wore his hair covering his ear and cut to his neck, with a moustache (A.S2-i, A.S3-i, A.S4-i, A.C6-i, A.C4-i, A.C4-ii). Most coins show him wearing a pointed headdress, sometimes with a ball finial at the top (A.S3-i, A.S4-i, A.C6-i, A.C4-i, A.C4-ii), but on one issue he wears a helmet (A.C5-i). When his head is uncovered he wears a royal diadem. He is normally clean-shaven where the detail can be seen, but on two issues he has long sideburns (A.S3-i, A.S4-i). He is shown in a variety of postures, on horseback (A.S2-i), standing (A.S2-i, A.C6-i), seated on a Roman curule chair (A.C4-i) and on the ground (A.C4-ii). He normally has a large sword on his belt (A.S2-i, A.C4-i), but is also shown with a bow in quiver (A.S2-i), holding spear and shield (A.C6-i) or holding a battle axe (A.C4-ii).

The Soter Megas coinage, apparently introduced at the end of Kujula Kadphises' reign (Cribb 2014) and running through the whole of the next reign, has a representation of the ruler mounted on its reverse. The king is shown wearing the same outfit as on the 'Heraus' coinage, but with little detail and he is wearing a pointed headdress with diadem ribbons behind, as on Kujula Kadphises' other coins issued south of the Hindu Kush. The king on the Soter Megas coins is also shown holding a battle axe (with pointed blade) in his raised right hand, the same weapon as held by Kujula Kadphises on his seated king coins issued at the same late stage of his reign in Taxila (A.C4-ii). The pointed battle axe is also shown on one coin type of Azes I (Senior 2001, type 81) and appears among the weapons carried by the figures on the engraved bone Orlat plate (Pugachenkova 1991, pl. 245; Litvinsky 2001, 145; Ilyasov and Rusanov 1997–8, 119; Mode 2003).

Similar representations in other media could also be portraits of him or members of his court. Diademed figures, wearing the same clothes and hair style, but with ears uncovered and sideburns, are featured among the broken sculpture recovered from the royal sanctuary at Khalchayan (Staviskii 1986, pl. XIXa; Mode 2013). Although often described as a palace, this building appears to be of the same order as the Surkh Kotal and Rabatak *bagolaggo*s (Bactrian ΒΑΓΟΛΑΓΓΟ) and the Mathura *devakula*, housing images of the Kushan gods and Kushan kings. Textile fragments from Xiongnu burials at Noin Ula also show similar representations, with the same hair style with diadem, wearing cross-lapelled jackets and leggings or plate-mail armour (Staviskii 1986, pl. XIXb; Yatsenko 2012, 40, fig. 2). One of these textiles shows a figure on a curule chair, with hair cut to his neck, drinking from a cup beneath a lion standard (probably a reference to the Kushan goddess Nana), and wearing a cross-lapelled jacket and leggings, with a long sword on his belt, which must surely be Kujula Kadphises himself (Yatsenko 2012, 44, fig. 5). The cross-lapelled jacket and leggings outfit is also well known from representations in Bactrian art, as on the ivory plates from the temple of the Oxus at Takht-i Sangin (Litvinsky 2001, 144, fig. 6) and in Parthian art, on coins for over a century before Kujula Kadphises' reign (Sellwood 1980, types 39.1, 45.1, 46.1, 47.1, 48.1, 50.1, 51.1, 52.1, 53.1, 54.1, 55.1, 56.1, 59.1, 61.1, 63.1, 64.1, 66.1, 68.1 and 69.1) and in sculpture, such as the Parthian prince in the Shami temple (Ghirshman 1962, 88, fig. 99). The Shami prince is not only dressed in the same way as Kujula Kadphises on his coins, but also has the same moustache and hair style with diadem as on the 'Heraus' coins. The cross-lapelled jacket with leggings is also to be seen on the gold 'ruler and dragons' pendants found at Tillya Tepe (Sarianidi 1985, 231, burial 2, no. 7, figs 44–7), where the figures dressed in this way also have the same hair style as Kujula Kadphises. The helmet, armour and weapons worn by the images on Kujula Kadphises' Hazara District mint copper coins (A.C5-i) also find parallels in the Tillya Tepe gold ornaments, where a pair of golden clasps (Sarianidi 1985, 236, tomb 3, no. 1, figs 81–4) show standing warriors with the same two-segment helmet, plate-mail armour and shield and spear as on the coins.

On Kujula Kadphises' 'Heraus'-type tetradrachms (A. S2-i) his representation shows another feature, the figure of flying victory crowning him from behind, borrowed from Parthian and Indo-Parthian coinage. The design seems to have been copied directly from the coinage of the Indo-Parthian king Gondophares (Senior 2001, type 216, a type

Figure 2.10 Silver denarius of the Roman Emperor Augustus, 27 BC – AD 14 (BM R.6170, 3.84g, 21mm).
Coins like this were imported into South Asia in the 1st century AD and this type was used by Kushan engravers at Taxila as a model for a short-lived issue of Kujula Kadphises (A.C4-i)

which shows the same control mark letters between the horse's legs as on the 'Heraus' coins). This imagery began to appear with non-equestrian royal portraits on Parthian coins from the time of Orodes II (*c.* 57–38 BC, Sellwood 1980, types 42.1 and 48.1). Curiously a similar flying victory is depicted crowning the god Dionysus and Ariadne, mounted on a lion, on a pair of gold clasps from the Tillya Tepe burials (Sarianidi 1985, 132–5, pls 77–9, 254, tomb 6, no. 2). The association with the 'Heraus' coins of Kujula Kadphises is reinforced by the 'Heraus' obol found in tomb 1 of these burials (Zeymal 1999, 241).

Kujula Kadphises' coins show a wide range of influences, particularly from the former Bactrian Greek, Indo-Greek, Parthian, Indo-Scythian and Indo-Parthian rulers of the areas he conquered or from imported Roman coins. The coins mostly show his portrait either as a bust or full-length. The busts are in the style of Parthian or Indo-Parthians coins; the full-length figures are closer in style to Indo-Scythian or Indo-Parthian coins. One full-length portrait shows the king in Central Asian dress of cross-lapelled jacket and leggings, with tall cap and with sword on belt, but the posture, seated on a curule chair, is copied from a coin of the Roman emperor Augustus (**Fig. 2.10**) (e.g. Sutherland 1984, 60, RIC1 270): there can be no other source for the obverse design. Roman coins were being routinely exported during the 1st century AD to South Asia (Turner 1989), including the Taxila region, where Kujula Kadphises' coin with this design was issued (*ibid.*, 72–3).

A.4 Kujula Kadphises: forms of name and titles

In the *Hou Han Shu* the first Kushan king is called 丘就卻 *qiu jiu que* (Old Chinese *khwə-dzuh-khak*, Late Han *kʰu-dziu-kʰiak*: Schuessler 2009, nos 4-14, 13-58, 2-2). The first two characters correspond closely to the first two syllables of Kujula Kadphises' name and the third could represent the fourth syllable, but could also be a mistake in the original reports or by the historian or by a later copyist. There can be no doubt of the match between the Chinese report and Kujula Kadphises' identity as the first Kushan ruler and conqueror of regions south of the Hindu Kush.

In the Rabatak inscription his name is reported as Bactrian KOZOYΛO KAΔΦIΣO, very similar to the forms appearing on most of his coins, Greek: KOZOYΛO KAΔΦIZ[O]Y (A.C2B-i) and Bactrian: KOZOYΛO KAΔΦIΣEI (A.C2B-ii). Two forms depart considerably from this: Greek: KOZOΛA KAΔAΦEΣ (A.C4-i) and Bactrian: KOZOYΛOY KAΔOBIKEI (A.C5-i). The inscription of the Odi king Senavarma (Baums 2012, 227–33; CKI 249) includes a Gandhari version of Kujula Kadphises' name *kuyula kataph*[śpa], a version unparalleled on his coins, where there are several variations: Gandhari: *kujula kasa* (A.C2A-i, A.C2B-i and -ii, A.C3A-i, -ii, -iii, -iv, A.C3B-i); *kuyula kaphsa* (A.C4-i); *kuyula kadaphsa* (A.C4-ii); *kuyula katakapa* (A.C6-ii); *kuyula katakapha* (A.C6-i, -ii); *kuyula katakaphsa* (A.C6-ii), *kuyula kaüsa* (A.C5-i); and Sanskrit: *kujūla katsa* (A.C2B-i). On one series Kujula Kadphises' name is abbreviated to *kuyula* (A.C3A-iii, reverse 2a) and then replaced by what appears to be *kalana kari* or *kalana kabi* (A.C3A-iii, reverse 2b and c). Whether these were intentional renditions or just incompetence/illiteracy on the part of the die engraver is unclear. It has been suggested that what appears to be the name king Kala Kabi (*maharaja kalasa kabi*[*sa*]) in the Kamra inscription is a rendition of his name (Dobbins 1975; Shrava 183, but see Falk 2015a, 129 for a different reading), and shows similarity of mispronunciation to the *kalana kabi* coins.

The Greek, Bactrian, Gandhari and Sanskrit variations on his name show a great deal of uncertainty about the precise sounds of his name and how to transcribe them. It seems likely that the Bactrian version in the Rabatak inscription represents the closest, as it was done long after the Kushans had been established in the region, by skilled workmen closely associated with the court. The parts of his name were clearly seen as a unit as in no instance is the first part of his name given an inflection, even though the names of his son and grandson make it clear that the two parts could be separated and used in other names. The abbreviated version *kuyula* on a single coin type (A.C3A-iii, reverse 2a) is clearly an error. The suffix Kadphises in his name and in the name of his grandson Wima Kadphises is not a separate name. Sims-Williams (2002, 236–7) suggested that Kujula Kadphises' name is of Yuezhi origin, and not Bactrian because of the consonant cluster *dph*. He identified eastern Iranian parallels to components of both parts of the name, *ula* (or OYΛO) and *sa* (or ΣO or ZO) suggesting they were hypocoristic suffixes (i.e. diminutive or familiar formations). He saw the initial element of his name *kuj* (or *kuy* or KOZ) as having a meaning like 'seek' or 'ask' (*ibid.*, 237).

In the inscriptions of Azes years 122 and 136 (Skinner 2 and 4; CKI 60 and 59), Kujula Kadphises is referred to simply as 'Kushan', rather than by name. He is also named in the same way on coins (types A.S2, A.S3 and A.S4). The Mat portrait sculpture of his son Wima Takto also refers to Kujula Kadphises as 'Kushan' (Skinner 7; Shrava 2). The use of the name 'Kushan' by most of his successors, as only Wima Kadphises lacks an example of this, until the Bactrian inscriptions disappear on late Kushan coins, suggests that it was adopted as a dynastic name after Kujula Kadphises' death.

The portrait sculpture inscription of Huvishka at Mat (Shrava 66; Skinner 45) seems to make reference back to Kujula Kadphises, where it refers to Huvishka's *pitāmaha* (grandfather) and gives the title *satyadharmasthita*, a Sanskrit

version of the Gandhari title *sacadharmathita* used by Kujula Kadphises on one series of coins (A.C4-i).

The coins and inscriptions relating to Kujula Kadphises issued in the areas he conquered south of the Hindu Kush show the adoption of new titles. The coins issued at Begram all use his Kushan yabgu title, likewise at Taxila, apart from one issue (A.C3A-iii, obverses 2a–c) with the Gandhari title *maharaja* (literally 'great king', but seemingly used as the equivalent of Greek ΒΑΣΙΛΕΥΣ or Bactrian ÞAO, both meaning king). Kushan yabgu also appears on the coins attributed to Hazara District. The coins issued in Kashmir all use the Gandhari title *maharaya* (or *maharaja*), but with imperial addition *rayatiraya* (king of kings), except on the last issue. The Sind coinage also uses the imperial title *maharaja rajatiraja*. It has been suggested that the transition from yabgu to king/emperor represents an extension of power: 'C'est entre la conquête des Paropamisades (Kāpiçi) et celle du Jibin, que le prince du Guishuang est passé du statut de *yabghu* à celui de *maharaja*' [It is between the conquest of the Paropamasides (Kapisa) and that of Jibin, that the Kushan prince passes from the staus of *yabgu* to that of *maharaja*] (Thierry 2005, 472), but the coins do not show such a transition, and there has never been any evidence from this period that titles reflected steps in the growth of political power in this way. The last coins issued at Taxila still retain the yabgu title and the earliest coins in Kashmir use the full imperial title, so it is a matter of local decisions by the mint administration. In Gandhari inscriptions made during his reign, Kujula Kadphises was referred to as king (Azes year 122; Skinner 2; CKI 59), emperor (i.e. king of kings) (Azes year 136; Skinner 4; CKI 60) and yabgu (Azes year 126; Skinner 3; CKI 331), and as emperor in the Odi (Swat) king inscription (Skinner 5; CKI 249). The adoption of royal and imperial titles seems to be a borrowing from the Indo-Parthian kings he was presumably in conflict with.

The imperial title adopted by Kujula Kadphises was continued by his immediate successors and became a convention which continued to be used until at least the reign of Shaka, the penultimate Kushan ruler, in spite of the gradual loss of territory to the Iranian conquests. Alongside the imperial title the early Kushan kings used other titles which also became customary.

On his Begram and Taxila coins Kujula Kadphises normally used his Kushan yabgu title and adopted the Gandhari title *dha*[*r*]*mathida* (steadfast in the law, various spellings) and expanded it to *sacadharmathita* (steadfast in the true law) on one late issue from Taxila (A.C4-i). On his Kashmir issues (A.C6-i and -ii) he used Gandhari titles, on most varieties the full imperial title *maharaya rayatiraya* (king, king of kings) with an additional title *devaputra* (son of the gods), but on a late variety he only used a royal title *maharaja* with *devaputra* together with the additional title *mahada* (great). The imperial title was also used on the Sind issues (A.S3-i and A.S4-i). On a so-far unique coin (A.C2B-i, 1C/1b) from Begram an Indian title *svami* also appears. There are no other instances of this title being used by the Kushan kings, but it is paralleled on the slightly later copper coins and inscription of the Western Satrap ruler Jayadaman, *c.* AD 131 (Jha and Rajgor 1992, 119–20). In each of his inscriptions yabgu, king and emperor are used respectively (see §A.4 above). In the Odi king's inscription, however, it is not clear whether it is he or his son Sadaṣkaṇa who is given the title *devaputra* (Baums 2012, 227–33, no. 24).

At Begram his final issues, the anonymous Soter Megas coins (B.C1-i), used the imperial title, Greek ΒΑΣΙΛΕΥΣ ΒΑΣΙΛΕΩΝ (king of kings), and his son continued both this anonymous coinage and the usage, including in one series (B.S1-i) equivalent Gandhari titles as well as the usual Greek version. These titles were adopted from Kujula Kadphises' contemporaries the Indo-Parthians, Gondophares, Sasan and Sarpedanes (Senior 2001, types 216–20; 242, 238 and 255), who had inherited their use from the Indo-Greeks via the Indo-Scythians. The same titles continued on his son's and grandson's coinages.

A.5 Kujula Kadphises: religious connections and imagery

The deities represented on Kujula Kadphises' coins show the influence of previous coinages from the regions conquered, but also some deliberate choices indicative of royal cult. The Greek gods Zeus, Nike and Heracles are featured in designs already known from earlier Greek, Indo-Scythian and Indo-Parthian coins. The representations of Zeus and Nike were direct borrowings, but the choice of Heracles, on his imitation Hermaeus coins issued at Begram and Taxila, seems to have been deliberate, as it replaced Zeus on the coins being imitated. Heracles seems from later coins to be a representation of the Kushan god Oesho, as this god's name was recut over that of Heracles during Kanishka I's first phase of gold coinage (D.G1-i, Ch. 3 §D.1; see also §D.5.2 below). In one phase (A.C3A-iii) the die engraver at the Taxila mint seems to presume that the imitative portrait bust, based on the coins of the Indo-Greek king Hermaeus, on the obverse of the coin actually represented Heracles, as he engraved a knotted lion skin in place of the cloak round the bust's neck, as Heracles is often shown in Greek art. Heracles' attributes were also adopted in the depictions of the Buddha's attendant Vajrapani in Gandharan sculpture (**Fig. 2.11**). Such small alterations to the design likely represent the partial understandings of individuals at the mint rather than deliberate policy decisions, but they can be indicative of changing perceptions of already established imagery.

On his Kashmir issues animals associated with gods, the bull and camel, were also featured. The bull on Kujula Kadphises' Kashmir issues could also be a reference to Oesho as from the time of his grandson Wima Kadphises imagery of the Indian god Śiva, whose companion was a bull, was used to represent Oesho. The camel could be associated with the Kushan god Pharro who was represented as the camel-riding god Verathregna in later Sogdian art (Azarpay 1981, 61; Grenet 1995–6, 284, 294, fig. 8). So although the choice of coin designs was largely dictated by the desire for his new coins to fit into existing systems and expectations, there are traces of the Kushan religion which became more obvious from the reign of Kanishka I.

Although some have sought to use the Kushan cult of the god Oesho as evidence of the attachment of the Kushan kings to the Hindu deity Śiva (Mukherjee 2004, 30–1), the

Figure 2.11 Fragment of relief sculpture from Gandhara, Kushan period, depicting the Buddha's attendant Vajrapani, holding a sword and thunderbolt (BM 1970,0718.1, schist, 540mm x 250mm). Vajrapani is often depicted with attributes of the Greek god Heracles, here wearing his lion skin head-dress and cloak, tied using the paws beneath the neck, as on some coin issues of Kujula Kadphises (A. C2A-iii)

evidence suggests that they were using the iconography of the religions they encountered to represent their own deities who had no previously defined iconography of their own (Zeymal 1997a; Cribb 2008; Grenet 2015). The [*saca*] *dharmathita* title used by Kujula Kadphises has also been used to suggest that he was either a Shaivite or a Buddhist (Mukherjee 2004, 30), but it is clear from the Dasht-e Nawar and Rabatak inscriptions that it is part of the Kushan royal titulature inherited from the kingdoms which preceded them, who ultimately derived it from the Hellenistic royal practice of adopting such epithets, such as the Indo-Greek kings' Greek ΔΙΚΑΙΟΣ = Gandhari *dhramika* and Indo-Parthian *dhramika* or *dhramia* (i.e. just, adhering to the dharma). In the past misunderstood coin designs were used to discuss views on Kujula Kadphises' religious affinities. Whitehead (1914, 181, no. 29) identified the seated figure of Kujula Kadphises holding a battle axe (A.C4-ii) as the Buddha and Banerjea (1956, 112) identified it as Śiva, but the details of the figure, especially his headdress, make it clear that it is the king, as was already recognised by Coomaraswamy (1927, 302).

The decision to select the sun god to decorate the obverse of the anonymous Soter Megas coinage initiated late in his reign with a divinity shows a deliberate action. Such a decision, which involved a novel type and ultimately impacted coinage throughout the empire, was likely made centrally by the court, though the reasons for this change are unclear. The image shows the god with a halo of sun rays and holding an arrow. The arrow suggests the Greek sun god Apollo-Helios, whose main attribute is bow and arrow, but the rays relate more closely to the Kushan sun god Miiro who is featured on the coins of Kanishka I and Huvishka. The image also shows a similarity to an Eastern Roman (Caesarea Mazaca) issue of Trajan, AD 98–117, where the Greek moon goddess Artemis-Selene is shown holding an arrow in an identical gesture (Cribb 2014, 98). The choice of Miiro for this design reflects his importance in the Kushan royal cult.

The Odi king's inscription includes Kujula Kadphises' son Sadaṣkaṇa in its prayer for the bestowal of Buddhist honour, but one cannot presume from this that he or his father were Buddhists. In the other inscriptions mentioning Kujula Kadphises of years 126 and 136, Buddhist relic deposits were made, but the yabgu/king is only mentioned in relation to the date of the deposit, so there is again no indication of the religious affiliation of the king.

A.6 Kujula Kadphises: contemporaries and international contacts

As Kujula Kadphises was establishing his empire, the author of the *Periplus of the Erythraean Sea* was describing the trade in progress between the Mediterranean and South Asia (**Fig. 2.12**). Kujula Kadphises' enemies – the Indo-Parthians – are mentioned as the controllers of one of the ports in the *Periplus*, Barbaricon, described as a venue for profitable trade. The *Periplus* can be dated to the period *c.* AD 40–78, because it mentions Malichus II, king of Nabataea, *c.* AD 40–70, and Nahapana, king of Broach (**Fig. 2.13**) whose reign ends *c.* AD 78, when he is succeeded by Castana, king of Ujjain who founded the Śaka era in AD 78 (Cribb 1998a; Casson 1989, 6–7). The port of Barbaricon, located at the mouth of the Indus, is said by the text to be in the hands of Parthians 'who are constantly chasing each other away' (*Periplus* 38: Casson 1989, 74–5). The silver coins of Kujula Kadphises (A.S3 and A.S4) were copied from Indo-Parthian coins issued in this region. There appear to be five Indo-Parthian kings issuing such coins (Senior 2001, Sasan type 245, Satavastres type 250, Gudana(?) type 251, Sorpedanes type 252; Senior 2006, Agata(?) type S36), perhaps reflecting the in-fighting of the local Indo-Parthians referred to by the *Periplus*. The coins of Kujula Kadphises seem to be issued in the same series, as a brief incursion by him into this Indo-Parthian domain. Some of the Indo-Parthian coins are overstrikes on issues of their southern neighbour Nahapana, king in western India. Nahapana is described in the *Periplus* as the ruler controlling the next port Barygaza (Broach) on from Barbaricon (Casson 1989, 76–7, §41).

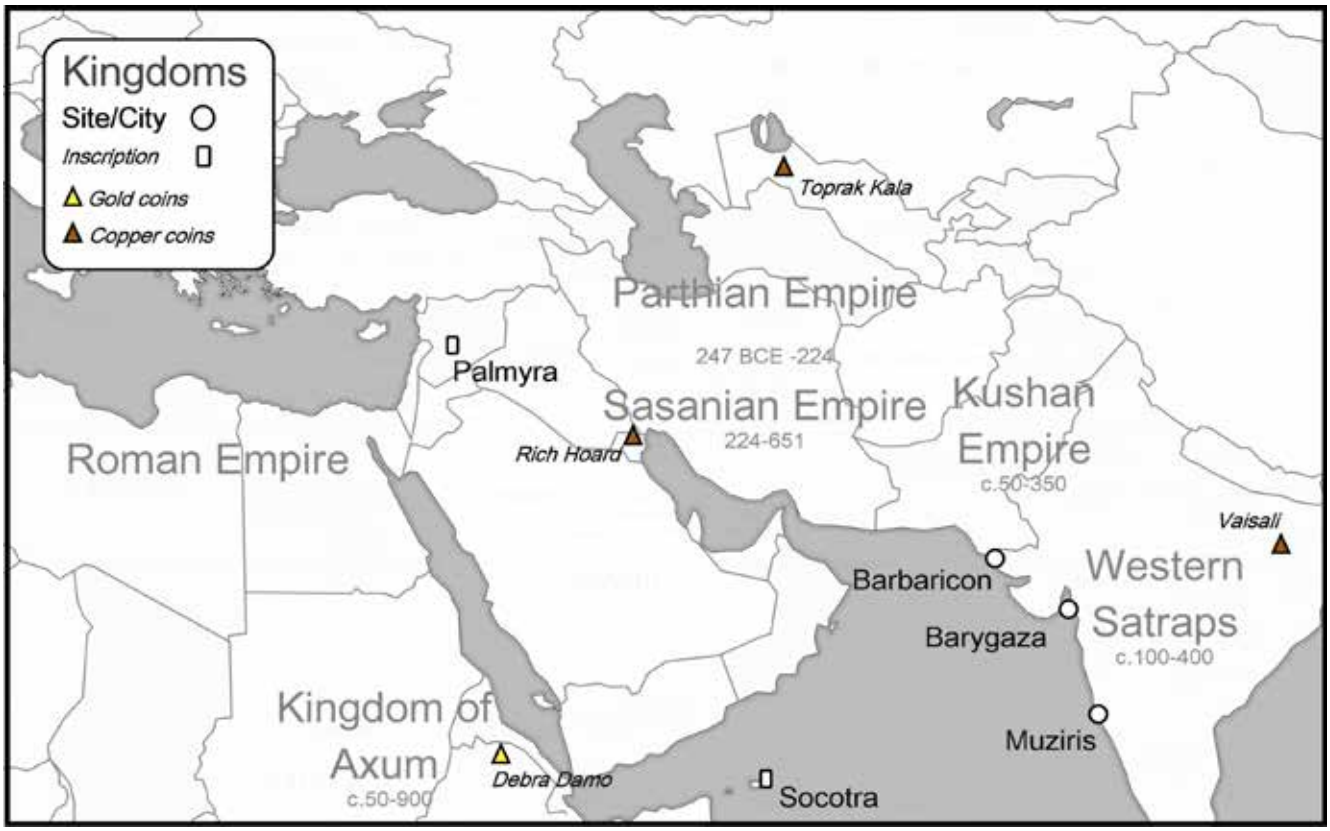


Figure 2.12 Map of Eurasia depicting major contemporaries of the Kushan Empire, finds of Kushan coins outside of South Asia and sites beyond the Empire where evidence of Kushan contact survives. Modern borders are shown for reference

The trade at Nahapana's port was varied, but included the import of Roman gold and silver coins. Roman coins were also being imported into Barbaricon (*Periplus* 39: Casson 1989, 74–5). Such coins penetrated inland along the Indus and have been found at various sites in the northern Punjab and Hazara District (Turner 1989, 66, 72 and 78). A coin imported through this route was probably the inspiration for one of Kujula Kadphises' Taxila issues (A. C4-i).

Another traded item at both ports was a material known to the Romans as Seric cloth. This is normally translated as Chinese silk, but there is confusion in the Roman texts about what kind of cloth it was. The Roman natural historian Pliny the Elder, writing in the 1st century AD, described in precise detail the production of silk from silk moth cocoons in the eastern Mediterranean (*Natural History* 11.26–7: Rackham 1938, 478–81). Seric cloth is described by him as a product of trees, suggesting the production of cotton thread, and he located the land of the Seres beyond the Scythians (6.20, 54: Rackham 1942, 378–9). This suggests that from the Roman perspective Seric cloth was not silk, but cotton; nevertheless they believed it came from Inner Asia, and it therefore had to pass through the lands controlled by the Kushans in order to reach the ports with which Rome traded. The *Periplus* (64–5) also contains a passage which makes it clear that the Seric cloth is, however, silk and that it came from China, as it describes it coming from a distant city called Thina (θῖνα). It says that Seric floss, thread and cloth (τὸ ἔριον καὶ νῆμα καὶ τὸ ὀθόνιον τὸ σηρικὸν, literally Seric wool, thread and linen) are exported from there via Bactria to Barygaza (Hansen 2017, 34–5). A fanciful account of Roman and Kushan involvement in this trade in silk was created by Warmington (1928, 174–9). Another indication that Chinese silk was involved is in the *Hou Han Shu*, which reports of Rome that 'its king often wished to send envoys to the Han, but Anxi (Parthia) wanting to control the market in Han fine and coloured silks, closed the routes to prevent access' (其王常欲通使於漢，而安息欲以漢繒綵與之交市，故遮閡不得自達, *Hou Han Shu* 86.27: Hill 2009, 26–7; Hansen 2017, 33–4). If Parthian Iran is meant, then it indicates a route through Afghanistan into Iran, but if the Indo-Parthians are meant then the route down the Indus described in the *Periplus* is meant. A route across Iran into the rump of the Indo-Parthian kingdom in south-western Afghanistan was described by the early 1st- AD writer Isidore of Charax in his *Parthian Stations* (18–19: Schoff 1914, 7–9).

Figure 2.13 Silver drachm of Nahapana, king of Broach, c. AD 35–78, western India (BM 1919,0609.6, 2.27g, 17mm).
Nahapana is mentioned in the *Periplus of the Erythraean Sea*, the anonymous guide to trade in the Indian Ocean, written in Greek in the 1st century AD, which also mentions the rise of Kushan power (see §2 above)

Figure 2.14 Silver tetradrachm of Jihonika, Indo-Scythian satrap of Kashmir, *c.* AD 30–60 (BM 1868,1243.13, 10.21g, 27mm) whose coin designs were adopted by Kujula Kadphises (A.S-2, A.S4 and A.C6-ii).
Jihonika, also known as Zeionises in Greek was Kujula Kadphises' predecessor in Kashmir. His hair and moustache were dressed in the same was as Kujula Kadphises' on his silver coins from Tokharistan (A.S2)

Figure 2.15 Base silver drachm of Rajuvula, satrap of Taxila and Mathura, 1st century AD, issued in Jammu (BM 1857,0813.54, 2.34g, 14mm).
Rajuvula's satrapy included territory from Taxila to Mathura. Kujula Kadphises captured Taxila from him and Wima Takto took Mathura from his grandson Kharahostes. His hair and moustache were dressed in the same way as Kujula Kadphises' on his silver coins from Tokharistan (A.S2)

Unfortunately documentation of the details of the trade is slight. No documents survive from the Kushan empire itself, and with the exception of the Begram material (see below), no objects. Some traces of the routes are preserved further west. The first of these is the island of Socotra in the Indian Ocean, where Indian sailors stopped and left inscriptions; from their names and language they appear to have been sailing from ports in the Western Satrap territories of western India but also included people from the north-west. A Palmyrene merchant named Abgar also left a votive plaque on the island, wishing for safe travel (Strauch 2012). This is appropriate as Palmyra seems to have been a terminus for at least some of the trade and has yielded examples of Chinese silk and patterned fabrics, published with much excitement after they were found in the 1930s (Riefstahl 1935; Maenchen-Helfen 1943; Pfister 1937; 1940). In some cases the fabrics were even inscribed with Chinese characters (Falkenhausen 1999, 42–52) confirming their point of origin, and demonstrating that silk must have been imported to the west before the Romans sacked the city in AD 273. Several inscriptions from Palmyra from the mid-2nd century report merchants returning by ship from 'Scythia', undoubtedly the coast of Sind/Baluchistan, indicating the routes (Gawlikowski 1994, insc. 20 and 24; Fox *et al.* 2005, 90). One inscription, it has been suggested, even refers directly to the Kushan empire, according to Delplace (2003), who identified Kanishka in inscription PAT 0306, dated AD 157. Of course, not all goods were landed in the Gulf for transport to Palmyra, but our only record for trade via Egypt, a copy of a loan agreement relating to shipment of goods from the Red Sea port to the Nile delta, relates to a shipment out of Muziris in South India rather than Kushan territory (Casson 1986 with translation).

The position of the Kushan administration in relation to this trade is not described in the texts in the way it has been implied by many scholars (e.g. Chakravarti 2019, 349), and should be questioned (Morris 2019, 681–8). Trade with Kushan territory is, however, confirmed by the *Periplus* mentioning lapis lazuli, a natural product of north-eastern Afghanistan, among the goods available at Barbaricon. It is nevertheless difficult to ascertain from ancient sources the extent to which the Kushan state participated in the trade crossing its empire. The *Hou Han Shu* does not mention trade in relation to the Kushan empire, but it does in the descriptions of the peoples the Kushan state had incorporated into its territory, such as the description of the people of Gaofu as merchants who have great wealth (88.31: Hill 2009, 28–9), or the list of goods traded from Tiandu with Rome (88.32: Hill 2009, 30–1). Gaofu became part of Kushan territory under Kujula Kadphises, and Tiandu under his son Wima Takto.

In the territories which Kujula Kadphises conquered he took control of smaller kingdoms and satrapies ruled by the Indo-Parthian kings Gondophares, Abdagases and Sasan and their lesser contemporaries Sarpedanes, Satavastres, Orthagnes and Ubouzanes, as well as the independent Indo-Scythian satraps Jihonika (Kashmir) (**Fig. 2.14**), Rajuvula (Taxila and Jammu) (**Fig. 2.15**) and Mujatria (Nagarahara) (see **Fig. 2.2**) and the Indo-Scythian kings of Odi (Swat) and Apraca (Bajaur?) (**Fig. 2.16**). The inscription of Senavarma king of Odi (Baums 2012, 227–33, no. 24) and the adoption of the same symbol on the coins of Mujatria as appeared on Kujula Kadphises' Taxila issue (A.C4-i) shows the type of relationship of submission established over some of the lesser rulers. Most of these states, however, disappeared as the Kushan conquest advanced. Like the Kushans the Indo-Parthians and the Indo-Scythians were foreign invaders, so there was probably little change in the population, but a change of the ruling elite.

Indo-Parthian rule survived in Gandhara, Arachosia, Jammu, Sind (apart from Kujula Kadphises' brief incursion) and was briefly established in Taxila (after Kujula Kadphises' capture of the city) until the extension of Kushan power there under Wima Takto. From the continuing coin series (Senior 2001, types 271–4) which followed Pakores, the Indo-Parthian contemporary of Wima Takto (Senior 2001,

Figure 2.16 Base silver tetradrachm of Aspavarma, general of the Apracaraja kingdom (BM OR.7312, 10.17g, 21mm). Aspavarma was the last Apracaraja to issue coins. He seems to have had a close link with the Indo-Parthian ruler Sasan (Fig. 2.9), and on some of his coins adopted the Indo-Parthian tamga

Figure 2.17 Copper tetradrachm of Pakores, Indo-Parthian ruler in Arachosia, 2nd century AD, over-struck on Soter Megas issue of Wima Takto (BM 1991,0104.10, 8.20g, 24mm). The overstriking of Wima Takto's coins suggests a temporary resurgence of the Indo-Parthian kingdom in the face of Kushan conquests spreading beyond the Punjab and Gandhara

type 269, mostly overstruck on Soter Megas coins) (**Fig. 2.17**), a separate Indo-Parthian kingdom seems to have survived in its most westerly strongholds. This territory which remained under Indo-Parthian control is designated '(Southern) Arachosia' by Simonetta and MacDowall (Simonetta 1957, 50; MacDowall 1965, 144–5; Simonetta and Widemann 1978, 167). Farn Sasan, the last ruler of this territory to issue coins related to the Indo-Parthian series (Senior 2001, types 275–7), used designs similar to those of the first Sasanian emperor Ardashir I (AD 223–40), suggesting a survival of Indo-Parthian rule into his reign, but locally collected early Sasanian coins in Kandahar (MacDowall and Ibrahim 1978; Simonetta and Widemann 1978, 186) suggest that the Sasanians took control of the residue of the Indo-Parthian kingdom by AD 240, the end of Ardashir I's reign.

The quantity of Kushan coins from Kujula Kadphises until Kanishka II in the Kandahar Museum collection (MacDowall and Ibrahim 1978) suggests that the Kushans could have had a presence in the city, but there is no evidence of a Kushan mint being established there or of it being a Kushan administrative centre (Kandahar Museum collection: Kujula Kadphises x8 (coins), Soter Megas x11, Wima Kadphises x2, Kanishka I x12, Huvishka x7, Huvishka imitations x51, Vasudeva I x9, Kanishka II x2).

During Kujula Kadphises' conflict with the Chinese army in Inner Asia and his attempts to make a stronger relationship with the Chinese by seeking a marriage alliance (see §A.1 above), the Chinese records refer to another marriage alliance achieved by the Kushan king, with the kingdom of Kangju. According to the *Han Shu* (96A.15B: Hulsewé and Loewe 1979, 123–6) Kangju was a nomad state, 'way of life like the Da Yuezhi', and like the Da Yuezhi had problems with the Xiongnu, but otherwise little is known about it, other than it had yabgus like the Da Yuezhi. Although it is often translated as Sogdia, it is difficult to equate it with the settled city states of that region. Kangju's position to the north of Anxi, i.e. Parthian Iran (*Hou Han Shu* 118.8a: Hill 2009, 22–3), north of the Da Yuezhi, north of Da Yuan, i.e. Ferghana in eastern Uzbekistan (*Han Shu* 96A.17B: Hulsewé and Loewe 1979, 132), and north-west of the Wusun, i.e. north of the Tianshan mountains in modern Kirgizstan (*Han Shu* 96B.1B: Hulsewé and Loewe 1979, 73) suggests that Kangju occupied the territory in the Tashkent region or further north in southern Kazakstan and to the north of the city states of central Uzbekistan (Samarkand and Bukhara). The Kangju relationship with the city states of Sogdia was probably similar to that of the earlier Da Yuezhi over the settled peoples of Da Xia.

Sogdia consists of several oasis cities located north-west of Bactria between the Amudarya (Oxus) and Syr Darya (Jaxartes) rivers, and watered by the westward flow of the Zarafshan and the Kashkadarya rivers, which for most of the early centuries AD appear to have been independent principalities each issuing their own coins. The only direct reference to a connection between the Kushan empire and Sogdia is found in the Chinese chronicle *Hou Han Shu* (77.6; Zürcher 1968, 369–70). When the Chinese general Ban Chao was besieging the king of Kashgar in AD 84 he asked the Kushans for help because 'at that time the Yuezhi had recently established bonds of marriage with Kangju'. As a result of Kushan intervention the Kangju withdrew their support for the king of Kashgar.

This reference is ambiguous as it is unclear to whom the term Kangju refers. There is no doubt that the location of the Kangju corresponds with the geographic position of Sogdia but the Kangju are described as a nomadic people. One possibility is that the Kangju exercised some level of suzerainty over the various oasis towns, probably in the form of tribute, without exercising any direct administration. However, as the contemporary Chinese sources never make such a distinction it remains ambiguous whether in this case

Figure 2.18 Silver coin of Ashtat, ruler of the Sogdian city state of Nakhshab, early 1st century AD (southern Uzbekistan), inscribed in Sogdian and Greek (BM IOC.369, 2.95g, 16mm).
Ashtat's depiction with moustache and sideburns resembles that of Kujula Kadphises on his Sind coins (A.S3 and S4) suggesting they shared sources of royal iconography

the Kushan relationship was with the nomadic confederacy or one of the oasis cities.

Sogdian-speaking merchants would go on to have a major role in the trade routes connecting Central Asia. The Sogdian inscriptions in the upper Indus, which are overwhelmingly concentrated at the site of Shatial Bridge (Jettmar 1991; Sims-Williams 1989a–92), are regarded as having come from a post-Kushan context, as do the famous Sogdian letters found in Chinese postal stations in the Tarim Basin. It is unclear what role Sogdian merchants might have played in the Kushan period itself. De la Vaissière (2004; 2005, 83–5) argues that the stability brought by the Kushans encouraged Sogdian merchants to emigrate to the Kushan empire and that their initial routes developed during the Kushan period, but they only adopted their dominant role in the 3rd and 4th centuries AD when Kushan power declined. As with most theories that connect trade and political power in this period it rests more on assumptions about the nature of that connection than actual evidence.

In the Kushan period our understanding of the political arrangement of Sogdia depends mostly on coins. Unfortunately, the coins of Sogdia pose particular problems of interpretation and attribution; for a discussion of these problems and the relatively wide range of attributions in English see Naymark (2016). Sogdian coinage began as imitations of Greek coins and exhibits a tendency towards imitation and immobilisation through the mid-1st millennium AD. At some moments new designs and types were initiated, sometimes recording names or titles, and these became the models for subsequent imitations. For this reason it is not possible to generate a list of Sogdian rulers using the coins, in the way that it is for the Kushans and most of their contemporaries. The tendency to imitation and immobilisation might suggest a political environment in which familiarity lent the coins more authority than the current ruler could, which would fit the picture of nominally independent rulers in the cities subject to the nomadic confederation of the Kangju (in most cases a type is found primarily around one city).

In the 1st century AD, contemporary with or slightly earlier than the reign of Kujula Kadphises, Sogdia exhibits one of its periodic innovations of types, which set the new models for imitation throughout most of the Kushan period. At this moment several names (or possibly titles) appear including Hyrcodes, Ashtat and Phseighacharis. Naymark writes of them:

> The Ashtat coins belong to a larger group of Central Asian coinages characterized by the combination of the Hellenistic methods of production with a very specific style of portrait, depicting local rulers of steppe origin in their traditional kaftans and with particular features of hairstyles, beards and moustaches (Naymark 2016, 62).

As can be seen, the similarities, particularly the style of moustache, sideburns and hair, between Ashtat's depiction (**Fig. 2.18**) and those of Kujula Kadphises on the northern 'Heraus' coins (A.S2) and Sind issues (A.S3 and 4) are obvious. It seems unlikely these are direct numismatic borrowings. More likely they reflect a common visual language for the representation of kings, perhaps between the yabgus of Bactria and a similar aristocratic class in Sogdia. However, while the coinages initially parallel each other that soon ends. The Sogdian coinages become immobilised, repeating these same designs, and in the 2nd century the Kushans reinforce the fortifications at the Iron Gates, apparently effectively enough to prevent Kushan coinage from entering Sogdia. Archaeologists working on the Sogdian oases note the substantial contraction in settled areas in this period (Naymark 1991, 156). While speculative it seems that Kushan relations with Sogdia shift from friendly to hostile under the later kings, but the reasons for this change remain unclear and await further research.

B.1 Wima Takto, c. AD 90–113: historical account (Fig. 2.19)

The *Hou Han Shu* recorded Kujula Kadphises' son succeeding him when he died (118.9a–b) and said his name was 閻膏珍*yangaozhen* (Old Chinese *lam-kâu*[*h*]*-trən*, Late Han, *jam*(or *wam*)*-kau-ṭin*: Schuessler 2009, nos 38-5, 16-1, 33-15). Only the first syllable of this coincides in any way with his name as documented from coins and inscriptions. Mukherjee (2004, 149–50) rejected the identification of the name in the Chinese source with Wima Takto and maintained his earlier view that it referred to Wima Kadphises. Although various attempts have been made to explain the *gaozhen* part of the king's name, for example Falk (2009, 113–14) explained it as a transcription of Kushan, i.e. *vema guṣāṇa*; and Yu Taishan (2014, 390) interpreted the whole name as Wima Kadphises, a satisfactory explanation remains elusive. The succession of Wima Takto after Kujula Kadphises' death, and therefore his identification with *yangaozhen* is assured by the Rabatak inscription and by the positioning of coins bearing his name or initial between the coins of Kujula Kadphises and his grandson Wima Kadphises (Cribb 2015), and by his coins being the first Kushan issues within India, which the Chinese source says *yangaozhen* conquered.

Although most of the coins issued during this reign are the anonymous Soter Megas coinage, several of them have his name and on one issue (B.C6-i) the tamga appearing on all the Soter Megas coins is associated with his name and a full figure enthroned portrait. Named and anonymous coins were issued at locations throughout the territory ruled by his father, but also in Gandhara and Mathura, where his father had not issued coins. Prior to his reign Gandhara had been controlled by the Indo-Parthian kings Gondophares, Abdagases and Sasan. Wima Takto took over Gandhara

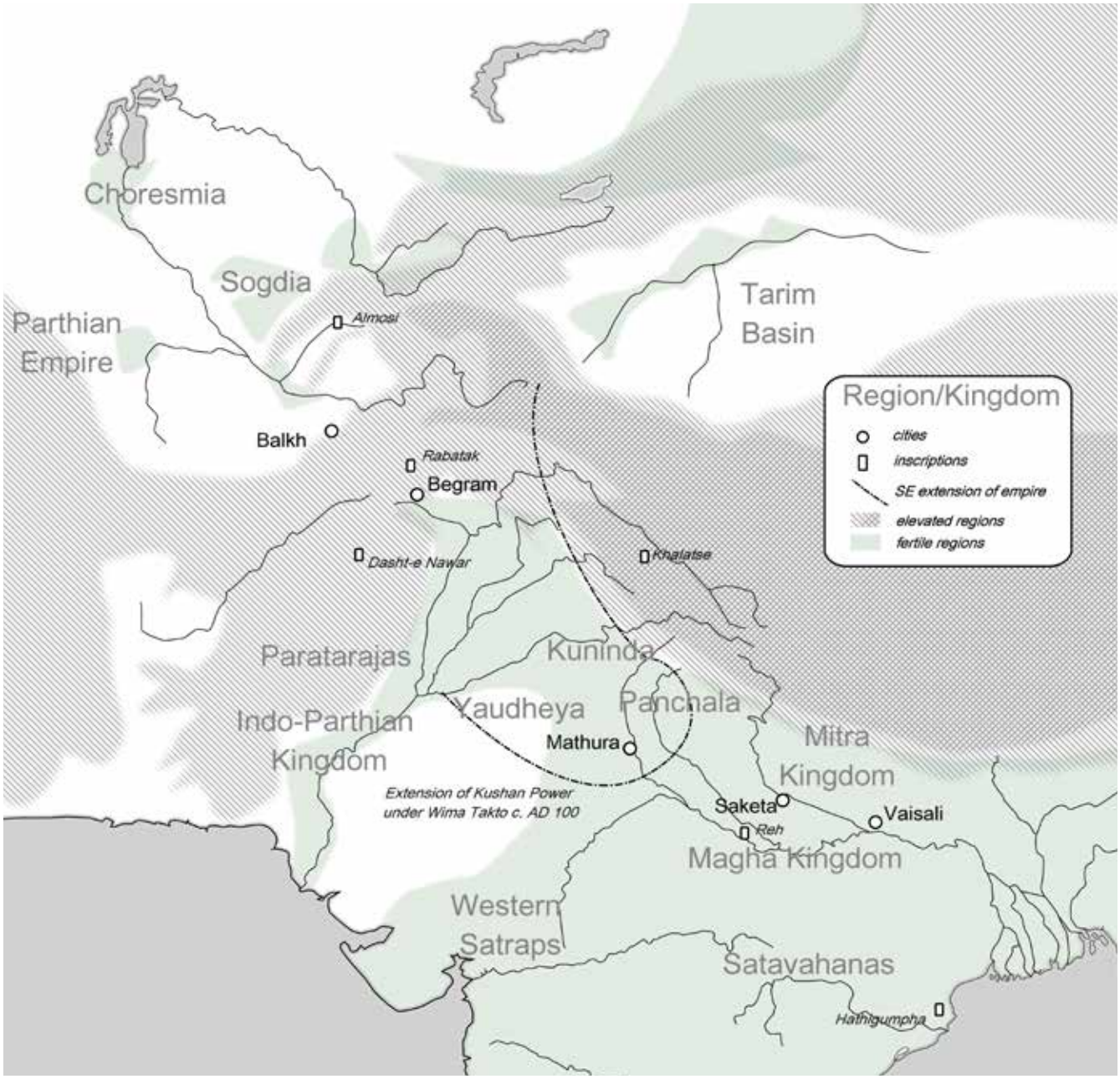


Figure 2.19 Map of the Kushan Empire in the 2nd century AD

from Sasan and seems to have captured Taxila from him. In Gandhara, Wima Takto issued coins in imitation of Sasan and overstruck his coins with an issue in his own name (B. S1-i, obverse 1A/reverse 1a) (Cribb 2015). His issues in Mathura follow those of the satraps Rajuvula (see **Fig. 2.15**), Sodasa (**Fig. 2.20**) and Kharahostes. The reigns of these satraps parallel the Indo-Parthians as further north Rajuvula was succeeded by Gondophares (Cribb 1985e).

The Chinese source (*Hou Han Shu* 118.9a) says of Kujula Kadphises' son Wima Takto that he destroyed Tiandu (天竺 *tiandu*, Old Chinese *thîn-tûk*, Late Han *tʰən-touk*: Schuessler nos 2009, 32-15, 14-8), also known as Shendu (身毒*shendu*, Old Chinese *lhin-dûk*, Late Han *śin-douk*: Schuessler 2009, nos 32-23, 14-5), both apparently representing transcriptions of India, i.e. beyond the Indus. This is confirmed by the issue of late Soter Megas coins in the Mathura region (B.C4) and a reference to a *maharaja* in a local Buddhist inscription dated 270 (Lüders 1961, 162–4, no. 77A, §123; Skinner Yavana era 10), presumably in the Greek era (i.e. AD 96). Before the Kushans the local rulers with similar inscriptions are all satraps, so this is the first evidence of the Kushan kings in that city, coinciding with the first Kushan coins issued there.

Figure 2.20 Copper unit of Sodasa, Indo-Scythian satrap of Mathura, 1st century AD (BM 1894,0507.179, 3.06g, 17mm.
Wima Takto captured Mathura from Kharahostes, Sodasa's successor. Kharahostes' reign appears to have been brief as it is only known from three coins (Cribb 2015, 30–1)

At the Kushan dynastic shrine of Mat, near Mathura, there is a sculpture of Wima Takto (Rosenfield 1967, pl. 1; see §B.3 below), identifying him as the son of Kushan, i.e. of Kujula Kadphises. The sculpture shows him enthroned in the same pose as on a rare coin on which he is given the title ÞAO (king) in Bactrian. The sculpture, which has previously been misidentified as representing Wima Kadphises, may be posthumous.

Wima Takto's presence in Mathura also leads one to suppose that he would be the Yavana king of Mathura who it has been suggested (Gupta and Kulashreshtha 1994, 184, n. 5) appears in the Hathigumpha inscription of Kharavela the king of Kalinga (Jayaswal and Banerji 1929; Barua 1929, 42). Unfortunately this part of the inscription is so worn, that the reading cannot be relied upon, and it has been argued that there is no king being named (Kant 2000, 14 and 54).

The *Hou Han Shu* (118.9a, b; Zürcher 1968, 368) also recorded that, having killed the king of *tiandu* (India) he appointed a general to rule it on his behalf. As he issued coins in Mathura, this is likely to be within the kingdom called *tiandu*. This statement has been used to create various scenarios for the development of Kushan rule during this period, but the Chinese source does not give any more details and attempts to interpret this are speculative. It also reported that a territory called 東離 *dongli* (*tôŋ-rai* Old Chinese, *toŋ-liai* Late Han: Schuessler 2009, nos 12-6, 18-11) and called 車離 *juli* (*ka-rai* Old Chinese, *kɨa-liai* Late Han: Schuessler 2009, nos 1-10, 18-11) in the *Weilue*, a later Chinese chronicle (Hill 2009, 268), had submitted to Kushan control. Its capital was called *shaqi* 沙奇 (Old Chinese *srâi-gai*, Late Han *ṣa-gɨe*: Schuessler 2009, nos 18-15, 18-1), which usually indicated Saketa (i.e. Ayodhya) in Chinese sources; whether this foreshadows Kanishka I's campaigns (see §D.1 below), or represents the extent to which Kushan control had been extended under Wima Takto, the last king mentioned in the report including this description is unclear. Neither of the names *dongli* or *juli* relate to relevant Indian states. The implication of the text is that *tiandu* means the territory to the west of *dongli*, i.e. India from the Indus to the Mathura region. Yu Taishan's suggestion that the correct name was *juli* and it can be identified with the South Indian state of Chola does not correspond with the account in the *Hou Han Shu* of a state south-east of *tiandu* (2014, 395). If the Reh inscription discussed below relates to Wima Takto, then it would also be suggestive of him campaigning beyond Mathura.

Earlier accounts of the Soter Megas coins presented the issues from Begram (B.C1-i to -iii) as the latest in Wima Takto's reign, positioning them as a unified imperial coinage which replaced several distinct series of local Soter Megas issues from Gandhara (B.S1, B.C3), Mathura (B.C4) and Bactria (B.C2-ii) (MacDowall 1960, 63–74; 1968, 28–48; 2005, 191). More recent analysis (Cribb 2015) of the Soter Megas coinage has demonstrated that the Begram issues were not initially issued as an imperial unified coinage, but were a local coinage for the Begram region begun under Kujula Kadphises, and that the other local Soter Megas coinages were in fact issued later, once Wima Takto had established control over Gandhara and Mathura. By the end of Wima Takto's reign it is possible that the Begram coinage had penetrated to most parts of the empire, as it has been reported from the territories north of the river Oxus/Amudarya (Rtveladze and Pidaev 1981, 56–63; Zeymal 1983, 160–77), and in Taxila (Khan 2014), and reputedly in northern India (Ray 1988, 141). Even if by the end of his reign Wima Takto's Begram coins had become a currency for the whole Kushan empire, it was a result of its success as a monetary system; its beginnings at Begram suggest that it was not originally issued with that intention. The evidence of the development of an imperial monetary system is in the apparent matching of the weight standards of the local issues in Mathura and Bactria to the Attic standard, and the gradual transformation of the original *c.* 10g coinage (B.C5-i) of Kashmir into a *c.* 4g coinage (B.C5-ii), half the Begram unit. Wima Takto's coinage for Gandhara (B.S1), however, did not match the Attic weight standard as it consisted of base-silver coins on the Indo-Greek standard, *c.* 9.6g, as used by his Indo-Parthian predecessors in Gandhara. The intentional standardisation of the Kushan coins as an imperial monetary system did not happen until the next reign.

An indication of the status of regional administrators in the early Kushan empire is recognisable in the copper coins of Wima Takto's Kashmir copper mint issued with the titles of a great satrap who was also the grandson of the king [*ra*]*japotra mahachadava*; unfortunately his name is missing (B.C5-iv). Apart from the name of a karalrang appearing on a few coins of the Gandhara copper mint under Huvishka (E.C2-ii, reverse 4i and 4j), this appears to be the only time a titled official other than a king was named on Kushan coinage.

B.2 Wima Takto: problems of chronology

Since the discovery of Wima Takto's name in the Rabatak inscription, some scholars have tried to question the reading of his name in the inscription (Fussman 1998, 604–9; 2001, 268–74). Mukherjee even replaced it with that of another ruler ΣΑΔΔΑÞΚΑΝΟ (i.e. Saddaškano, Mukherjee 1995, 14, 16–17), linking this with the Senavarma inscription's naming of Sadaṣkaṇa, son of Kujula Kadphises (*maharaja rayatiraya kuyula kataph*[*śpa*]*putro sadaṣkaṇo devaputro*; Baums 2012, 227–33; CKI no. 249). Fussman also sought to eradicate the reference to Wima Takto from the Mat sculpture (Fussman 1998, 609) and the Dasht-e Nawar inscription (*ibid.*, 618–19), insisting both referred to Wima Kadphises. However, the existence of Wima Takto witnessed by these three inscriptions is verified by the coins bearing his name in full (B.C5-i and -ii and B.C6-i) or abbreviated form (B.C2-ii, B.S1-i, B.C3-i). The context of the coins and the inscriptions both indicate a separate king with the name Wima Takto between Kujula Kadphises and Wima Kadphises, corresponding with the son of Kujula Kadphises named in the *Hou Han Shu* (Cribb 2018a).

B.3 Wima Takto: royal images

Although his name was not fully recognised until the Rabatak inscription was deciphered, a portrait statue of Wima Takto, from the Mat shrine north-east of the city of Mathura, has long been known. Previously identified as his son Wima Kadphises, the recognition of his name ensured

its correct attribution (Skinner 7). On the statue he is named and also identified as the son of Kujula Kadphises, under his dynastic name Kushan. The sculpture shows him enthroned on a lion-legged throne, wearing a belted Iranian tunic and leggings, decorated with plant motifs. Unfortunately, ancient damage, probably intentional, has removed his head and whatever he was holding in his hands. Across his lap there appears to be a dagger or short sword with two straps hanging from it between his legs. To the right of the king's right thigh there is a bundle which could be a spray of foliage, or a bundle of fabric. His right hand is raised to his shoulder apparently holding something, perhaps a club (as on most of the gold coins of Wima Kadphises (C.G1-i to -v) and on the Kashmir copper coins of Kanishka (D.C3-i)) or a branch (D.C3-iii, obverse 1B, -iv, obverses 1A and 4A) as on gold coins of Wima Kadphises (C.G1-iii, obverse 2A, -iv, obverses 1A and 4A). His left hand rests on his lap, perhaps holding the sword? He is also said by some (Mitterwallner 1986, 61) to be wearing an overcoat on top of his tunic and a cloak over his shoulders, but the details are not clear and there is no gap and broad hem visible which would be expected if a coat was worn over the tunic. The figure closely resembles the image on the coins bearing his name in Bactrian (B.C6-i), where he is also enthroned on a lion-legged throne, with his right hand holding something to his shoulder and his left on his lap. Unfortunately, although the head is visible, the details on the two known examples are very unclear. The shape of the head with a large bulk suggestive of a beard reaching below the neck-line suggests that the figure may be bearded. It does, however, have a halo round the king's head, a feature not encountered again until the reign of Kanishka I (D.C3-i and -ii). He seems to be wearing a pointed headdress like that worn on coins by his father, but the details of his clothes are unclear, apart from the bottom of his leggings. The hem above them is much lower than on the statue so could indicate that an overcoat is worn. The presence of a halo is an innovation in the art of the region and during the reign of Huvishka becomes a normal feature of royal imagery on coins. It also becomes a widespread aspect of divine imagery on coins from the reign of Kanishka I.

Two other images are known which show a Kushan king seated on a lion-legged throne. One is a very damaged relief at the site of the Kushan dynastic shrine *bagolaggo/devakula* at Surkh Kotal (Schlumberger *et al.* 1983, pl. 8, figs 21a and 21b; Rosenfield 1967, fig. 118). The figure is clearly enthroned on a lion-legged throne as the right leg (from the sitter's view) is still well preserved. Below the visible lion leg, the shape of a foot is visible, with a hem line just above ankle height, suggestive that the figure is wearing an overcoat. The head, viewed from the side, has a pointed headdress and long hair, and the shape of the head suggests that the figure is bearded. It is thought that the figure has flaming shoulders (Rosenfield 1967, fig. 118). Part of what looks like hair reaches over the shoulder, but may be a diadem ribbon. A smaller figure stands to the right (from sitter's view) of the enthroned figure, but no details are visible. The other representation is from a terracotta roundel found at Khalchayan (Pugachenkova 1971, fig. 54) which shows a similar scene with an enthroned Kushan king and a smaller figure to his right. The king sits on a lion-legged throne and is wearing an overcoat (to mid-calf) over leggings. He has a pointed headdress, like that worn by Kujula Kadphises. He holds a spray of foliage in his right hand to the right of his right shoulder and his left hand is resting on his lap. It is not clear whether he is bearded, but the head shape suggests not, as his collar is visible. The smaller figure to his right is also dressed in an overcoat over leggings and the hem of his tunic is visible. He has his right hand raised before his chest and seems to hold something, but his left hand is out of view. A third figure is also visible, a female floating in the air above the king's left shoulder, holding a diadem/wreath towards his head. The details of the female's dress are not clear, but suggest the shape of a long robe, with a hem at hip height. The figure appears to be a personification of victory, Greek Nike or Kushan Oanindo.

It cannot be certain which king is represented in these two images from Surkh Kotal and Khalchayan as two later Kushan kings, Wima Kadphises and Kanishka I, are shown enthroned in similar poses on coins (C.G1-iii, obverse 2A; C. G1-iii and -iv, obverse 4A; D.C3-i), but neither of them on a lion-legged throne.

On the Soter Megas coinage initiated in Gandhara which followed the coins of the Indo-Parthian king Sasan, the representation of the mounted king has two versions. One follows the designs introduced by his father showing the king holding a battle axe and wearing the same riding clothes as depicted on the 'Heraus' coins, but without the tall pointed headdress, replacing it with a diadem (B.S1-i, unit obverse 1A, quarter unit all examples). The other type shows the same representation of the king without headdress, but holding his right hand in a gesture of blessing in place of the battle axe, an identical gesture to that on the coins of Sasan, his Indo-Parthian predecessor in Gandhara (B.S1-i, obverses 2A and 2B).

B.4 Wima Takto: forms of name and titles

Since the name of Wima Takto was discovered in the Rabatak inscription it has been recognised in other contexts. The Bactrian form OOHMO TAKTOO is repeated on the enthroned king coin type (B.C6-i), and in both contexts he is entitled king. The initial letters of his name OO appear at the end of the Greek inscription of another type (B.C2-ii). In his Dasht-e Nawar inscription the Bactrian version of his name is spelt in the same way as in the Rabatak inscription, but with more damage to the letters (Sims-Williams and Cribb 1995–6, 95, 136). His name is followed in this inscription by KOÞANO, continuing the use of his father's name. On a so-far unique coin of his son, Wima Takto is also given the name KOÞANO (Cribb 2014, 91, 94). A slightly different spelling of his name with a Greek genitive inflection OOHMO TAKΣOOY is also found on this coin. Like his father's name, Wima Takto exhibits signs of being derived from an eastern Iranian language, as Sims-Williams (2002, 236–7) has shown the consonant cluster *kt* is not found in Bactrian, but is in other Iranian languages, and he suggests a Sogdian parallel to the name. Sims-Williams also posited an Iranian origin of the name Wima, pointing to Parthian, Armenian and Khotanese parallels, suggesting it may mean 'rock' (*ibid.*, 237).

Figure 2.21 Gemstone seal depicting a goddess, holding a mirror (?) and a spear, with the Kharoshthi inscription *maharaja devaputra – grama takhtuasa*, i.e. the great king, son of the gods, Wima Takto (BM 1892,1103.187, cornelian, 16mm x 14mm).
The seal shares the same unusual spelling of Wima as the recently discovered Kharoshthi document naming Wima Kadphises (Allon 2019)

On his first coins at his Gandhara mint (B.S1-i), his name is given at the end of the Gandhari inscription as *vema'a* and his initial in Kharoshthi *vi* appears on the same coins, and on the other issues of this mint (B.S1-i and B.C3-i) and on his issues for Bactria/Tokharistan (B.C2-ii). His name also appears in Gandhari in full on the coins from his Kashmir mint, in two different spellings: *vema takta* (B.C5-i) and *vema takho* (B.C5-ii). On some of the coins of this mint (B.C5-ii, obverses 2C and 3A) the beginning of his name is also featured as OOHMO. The Epigraphical Hybrid Sanskrit inscription on his portrait sculpture at Mathura appears to call him *vema takṣuma*. The Gandhari version of his name in the Dasht-e Nawar inscription is an exceptional and abbreviated form: *vhama kuśasa*, but it is difficult to verify from the illustrations whether this reading is correct (Fussman 1974, pl. V; Falk 2009, 113–14).

An engraved gem seal in the British Museum (**Fig. 2.21**), depicting a female figure in a long robe, but with bared leg, holding a mirror before her face, also seems to relate to Wima Takto (Falk 2009, 110–12, fig. 4), as it has a Gandhari inscription in Kharoshthi engraved on it. Falk proposed the reading *maharaja devaputra – grama takhtuasa*. The ruler named is clearly a Kushan because he uses Kushan royal titles. He proposed that the letter *gra* was an 'miscued' attempt to render the sound *v'e*, and discussed how such a form could have been arrived at. A similar form is found in a recently discovered Kharoshthi document naming Wima Kadphises (Allon 2019, see §C.4 below). The first syllable of Wima Takto's name is rendered in a variety of ways, as OOH in Bactrian and Greek, as *ve* and *vi* in Gandhari on his coins, and as *ve* in the Epigraphical Hybrid Sanskrit inscription at Mathura. It is also spelt *vi* with an added foot, *v'* on the coins of his son Wima Kadphises, and *uvi* in an inscription dated in his reign (from Khalatse: Skinner 8; CKI 62). The added foot seems to suggest that the sound *v'i* is to be pronounced *wi* (Glass 2000, 98). The original sound clearly did not have an exact match in Greek, Bactrian, Kharoshthi or Brahmi. The various spellings of Wima Takto's name once again reflects the difficulties of rendering Kushan names in the scripts available to the scribes within the Kushan empire.

Late in Kujula Kadphises' reign the Greek titles ΣΩΤΗΡ ΜΕΓΑΣ (saviour, great) were added to the imperial title on the new reformed coinage made at the Begram mint. These titles were adopted from Kujula Kadphises' contemporaries the Indo-Parthians, Gondophares, Sasan and Sarpedanes (Senior 2001, types 216–20; 242, 238, 255), who had inherited their use from the Indo-Greeks and the Indo-Scythians. The same titles continued on Wima Takto's and Wima Kadphises' coinages. In the Dasht-e Nawar inscription Wima Takto is named with the same titles in Bactrian ΒΩΓΟ (saviour), ΣΤΟΡΓΟ (great), together with others: ΡΑÞΤΟΓΟ (righteous), ΛΑΔΕΙΓΟ (just), ΒΑΓΟ (divine), and ΗΖΝΟΓΟ (worthy of worship). On the Wima Takto portrait statue at Mathura he is also given the imperial title *mahārājo rājātirājo* and the title *devaputro* as used by his father, together with a new title *ṣāhī*, which appears to be a transcription of the Bactrian royal title ÞΑΟ, also used for him in the Rabatak inscription. The Bactrian version seems also to be used on his rare coin type found in Hazara District (B.C6-i), where the base of the letter Þ can been seen on one example touching the left-hand side of the tamga. In the Dasht-e Nawar inscription he is given the full imperial title in Bactrian ÞΑΟΝΑΝΟ … ([king] of kings), in the same way as most of his coins entitle him in Greek ΒΑΣΙΛΕΥΣ ΒΑΣΙΛΕΩΝ, and in Gandhari on his Gandhara silver mint, *maharaja rajatiraja* (B.S1-i), and on his Kashmir copper mint coins, *maharaya rayatiraya* (B.C5-i) or *maharaja rajatiraja* (B.C5-ii). On his Kashmir copper mint coins he is also entitled *devaputra* (B.C5-i to -iii) and in the first phase additionally *mahata* (great, B.C5-i, reverse 1a, abbreviated to *maha* on reverse 1b).

An inscription discovered at the site of Reh in Uttar Pradesh shows a direct relationship with the titles used by Wima Takto and Kanishka I. It was published by Sharma (1980) as an inscription of the Indo-Greek king Menander (mid-2nd century BC), but the combination of titles used in the inscription were never used by Indo-Greek kings. As Gupta (1985; Gupta and Kulashreshtha 1994, 160–1) suggested, it has to relate to the Kushans. It is written in Brahmi on a large Śiva linga: *mahārājasa rājarājasa mahāmtasa trātārasa dhāmmīkasa jayamtasa ca apra*[*tihatasa*] … (great king, king of kings, the great, the saviour, the just, the victorious and the righteous). The text after *apra* is broken and only the tops of the characters in the next line are visible. The titles correspond with their Bactrian equivalents: *mahāmtasa* = ΣΤΟΡΓΟ (great), *trātārasa* = ΒΩΓΟ (saviour), *dhāmmīkasa* = ΛΑΔΕΙΓΟ (just), *jayamtasa* and *apra*[*tihatasa*] = ΟΑΝΙΝΔΟ (victorious and undefeated). The suggested completion of the word *apra*[*tihatasa*] is compatible with the traces, but the rest of the inscription is harder to reconstruct. In a Kushan inscription one would expect the name of the king to follow, but only the tops of letters are visible. Nevertheless the titles make it clear that it is a Kushan king being named as no other rulers with such imperial titles are known in northern India before the Gupta period in the 4th century AD, and that would be too late for the style of script. The inscription below the visible, but illegible, name is missing, but it is unlikely to be a dating formula, as private inscriptions would not include such elaborate titles. The only certainty about the name is that the first letter has an *i* vowel. The only

Figure 2.22 Copper coin of Rudradasa, king of the Audumbaras, Punjab, 1st century AD, featuring a temple and trident on the obverse and elephant and fig tree on the reverse (BM 1922,0424.4542, 2.59g, 16mm x 14mm).
This issue can be dated to the early Kushan period by the style of its Kharoshthi inscription

Kushan kings to whom that would apply are Wima Takto and Wima Kadphises; the second letter could be a *mā*, as it seems to consist of two upright strokes with a long vowel marked, but on the wrong upright (possible but rare), the third letter also has a long ā, but is otherwise illegible. The existence of what could be an official inscription well beyond Mathura is significant, but without the name difficult to interpret within the framework of the other evidence.

B.5 Wima Takto: religious connections and imagery

The presence of the portrait sculpture of Wima Takto within the royal sanctuary, the *bagolaggo/devakula*, at Mathura, and his name in the Rabatak inscription at another royal sanctuary, links him closely with the official religion of the Kushan kings as articulated in the inscriptions at the royal sanctuaries. His continuation of the sun god image on the Soter Megas coinage also continued to reflect the Kushan royal cult. However, the repetitions of designs initiated by his father or used by his Indo-Parthian predecessors owe more to the conservative tendency in coin design than matters of belief. The only original designs introduced during his reign which give any indication of religious devotion are on the small copper coins, inscribed with his initial (B.C3-i), which show images of a naked deity holding a spear and a goddess holding a cornucopia, which might represent Greek Heracles and Tyche, but could also refer to the Kushan gods Oesho and Ardochsho who are represented on coins of later Kushan kings. The halo featured round the king's head on one copper coin issue (B.C6-i) foreshadows the quasi-divine representations of his son on his coins.

B.6 Wima Takto: contemporaries and international contacts

Wima Takto's reassertion of Kushan rule in Taxila and his capture of Gandhara brought to an end the reign of Sasan, the third Indo-Parthian ruler in the region. As he moved south he also brought an end to the rule of Sasan in the lower Indus and Jammu. A rump of the Indo-Parthian kingdom in south-western Afghanistan survived his campaigns. Numerous overstrikes of Soter Megas coins by Pakores, one of the successors of Sasan in Arachosia and Seistan, suggest that he may have been in conflict in that region (Senior 2001, 184, n. 3). In Mathura he overthrew the rule of Kharahostes, an Indo-Scythian satrap, successor of Rajuvula and Sodasa (see **Figs 2.15**, **2.20**) (Cribb 2015, 30–1). Rajuvula was

Figure 2.23a–b Silver drachm and copper coin of the Kunindas, Punjab, 1st century AD (BM 1894,0507.112, 2.21g, 18mm; 1892,1008.189, 3.78g, 22mm).
The Kunindas were one of the kingdoms in the Southern Punjab/Upper Ganges which preceded the early Kushan kings. The denomination, die striking technique, and inscriptions derive from Indo-Greek or Indo-Scythian models but the symbols derive from local coinage traditions

previously satrap in Taxila and Jammu and appears to have retreated to Mathura under pressure from the Kushans and Indo-Parthians (Cribb 1985e). In north-western India he was also contemporary with various tribal states, such as the Audumbaras, Kunindas, Yaudheyas (see **Figs 2.22**, **2.23a–b**, **2.24**), etc., but there is no evidence that these states were under Kushan rule, or even submitted to the Kushans. The epigraphic evidence suggests that Wima Takto controlled the city of Mathura from at least AD 96, because as the first king to rule in the city during the period when Buddhist donative inscriptions were made he can be associated with an anonymous royal inscription dated Greek era year 270 (Skinner Yavana era 10).

Wima Takto's campaigns in northern India (§B.1) may have reached as far as the borders of Ayodhya, if the Reh inscription (§B.4) refers to him. It certainly resulted in the administrative incorporation of Mathura, as suggested by the opening of a mint and the construction of the Mat shrine in which Wima Takto's sculpture takes the central role. On the assumption that the incorporation of Mathura was the result of a military campaign it would mean marching an army past or through the territory of several independent kingdoms numismatically attested in the southern Punjab and upper Yamuna/Ganges region, raising a similar set of questions to those around campaigns into Kashmir, Taxila and Sind under his father (see §A.6). Historiographically it has been assumed that the Kushans must have conquered or displaced these groups on route. For example, Basu Majumdar (2009–10, 1054) postulates that a group of coins mixing elements of two local issues by the Kunindas and Yaudheyas represent a political/military alliance intended to resist Kushan incursions. However, this is highly speculative, as coin design rarely overtly speaks to

Figure 2.24 Copper coin of the Yaudheyas 2nd century AD (BM 1892,0207.5, 16.47g, 24mm).
This coin integrates aspects of Kushan design into a local coin type. As the Punjab kingdoms of the Audumbaras, Kunindas and Yaudheyas are known almost exclusively from their coins, it is difficult to draw conclusions about their political relations

contemporary political events in such a way, and there is very little evidence that these states were under Kushan rule, or even submitted to the Kushans in any meaningful sense (see also §E.6.1).

There are no records of interaction between the Kushan king and the Chinese during the reign of Wima Takto. It has been suggested that the viceroy Xie, who had led Kushan troops against the Chinese general Ban Chao (*Hou Han Shu* 77.7a, see §A.1 above) at the end of Kujula Kadphises' reign, was appointed as Wima Takto's governor in his conquered territory in India (Narain 1968, 216; Kim 2013, 32). Such a suggestion has no basis, as Xie is described as a *fuwang*, supporting king, i.e. viceroy (see §A.1 above), whereas the unnamed person appointed to rule in India on Wima Takto's behalf is identified only as a general (*Hou Han Shu* 118.9a and 9b; Zürcher 1968, 367, 368). Likewise there is no evidence that Xie was Wima Takto, acting as his father's heir as suggested by Thierry (2005, 481) and Falk (2015a, 100).

C.1 Wima Kadphises, c. AD 113–27: historical account

Wima Kadphises is not mentioned in the *Hou Han Shu*, as its account of the Kushan kings appears to predate his reign. There is, however, probably from the Chinese general Ban Yong's report, a slightly later set of events, occurring after his father Ban Chao's withdrawal from Inner Asia in AD 102 and before his own return there in AD 123. The *Hou Han Shu* (118.13b) described Kushan intervention in the kingdom of Kashgar (*shu-le*), installing a new king on its throne, a member of the Kashgar royal family who had been exiled to the Kushan court *c.* AD 114–20. The installation of the new king took place before AD 127, as in that year this king of Kashgar sent an envoy to the Chinese court (Zürcher 1968, 369; Hill 2009, 42–3). These events involving the Kushan court and its influence in Inner Asia took place during the reign of Wima Kadphises. It has been suggested that the exile of the Kashgar noble to the Kushans should be associated with an account by Xuanzang of hostages being kept by Kanishka in a monastery in Kapisa (Li Rongxi 1996, 40; 1995, 51; Narain 1968, 218–21; Hill 2009, 418). The Kashgar incident took place before Kanishka I's reign, according to the contemporary account in the *Hou Han Shu*, so the account by Xuanzang must relate to a different hostage.

The report of envoys from the king of the Bactrians to the Roman emperor Hadrian (AD 117–38) can also be dated to his reign or to that of his son Kanishka I (see §B.6 above and §D.6 below).

The only inscription attributable to Wima Kadphises by name is a petroglyph from Khalatse (Khalsi, in a remote valley in the Leh district of Kashmir, CKI 62; Skinner 8; Konow 1929, 79–81). This Gandhari/Kharoshthi inscription is simply a date, giving the reigning king and the year 287, probably in the Greek era, so was probably not completed. The site of the inscription is on one of the routes crossing the mountains into Xinjiang, so could be the work of a travelling merchant. The Kushan control of Kashmir established by Kujula Kadphises would also bring the location of this inscription close to or on the edge of Kushan territory. He is also mentioned in the Rabatak inscription as the third Kushan king, son of Wima Takto and father of the current king Kanishka I. His identity as son of Wima Takto might also be articulated in Greek on a very worn unique gold coin (Cribb 2014, 91–2). In both inscriptions he is given the simple title king (Khalatse *maharaja*; and Rabatak ÞAO). A Jain inscription from Mathura dated year 299 (Skinner Yavana era 4), probably in the Greek era, with the royal and imperial titles *mahārāja rājatirāja* in Epigraphical Hybrid Sanskrit/Brahmi can be attributed to his reign, as it is in the style of the inscriptions in the name of Kanishka I, but does not use the Kanishka I era. His name has also been discovered recently in a Kharoshthi document (see §C.4 below).

His coinage is plentiful and calls him king and, on some issues, also king of kings in Greek and Gandhari. The distribution of his coinage throughout the territory conquered by his grandfather and father suggests that by his reign a form of stability had been achieved across the empire. The unified appearance of the coinage was achieved through a complete centralisation of the minting process into two mints, one for gold and one for copper and strict control over the weight standard and quality. This is the first Kushan reign without local coinages and its monetary system can now be termed imperial. It set the model for the currencies of his successors which continued until the end of the dynasty, and also served as the basis for the coinages of the states which followed it: Kushano-Sasanian, Kidarite Hun, Gupta and Kashmiri.

C.2 Wima Kadphises: problems of chronology

The position of Wima Kadphises between his father Wima Takto and his son Kanishka, as indicated by the sequence of coins, is also indicated by the Rabatak inscription. The length of his reign is a matter of conjecture, based partly on the extent of his coinage and partly on the inscriptions

attributed to his reign. Initially the Khalatse inscription was read by its editors and commentators as year 184 or 187, because they did not notice the two marks above the hundred numeral or the clear three digits after the 4 (Mukherjee 2004, 408). This erroneous date has been combined with another of 191 in the Jihonika silver vase inscription (CKI 63), which is not a date, as widely believed (MacDowall 1973, 229), but its weight in karshapanas (Cribb 1999a, 196–7). Although the reign of Jihonika was succeeded by that of Kujula Kadphises, as indicated by his Kashmir coins with corrupted Jihonika inscriptions (A.C6-ii), these misunderstandings were used to construct an implausible context and chronology for Jihonika as Wima Kadphises' satrap or as an interrupter of Kushan rule between Wima Kadphises and Kanishka I (Narain 1968, 221; van Lohuizen-de Leeuw 1949, 378, 388; Puri 2014, 40–2). Placing the Khalatse inscription of year 287, which names him, in the Greek era and attributing the Mathura year 299 inscription, where there are royal titles but no name, to him in the same era, positions him precisely between Wima Takto and Kanishka I with a reign of at least 13 years, which fits the numismatic evidence without any need for other solutions.

C.3 Wima Kadphises: royal images

Although the recognition that the enthroned portrait from Mathura can now be attributed to his father, depriving Wima Kadphises of his only known portrait sculpture, his coins hold a rich array of royal imagery. On his double dinars (C.G1-iv) he is shown in five, possibly six, different ways.

The commonest design, in two versions facing right and left, shows the king emerging from the top of a mountain. He is dressed in an overcoat when facing left and with a cloak (presumably over the overcoat) when facing right and has a tall headdress, like his predecessors, but with a broad peak and a decorative line on the side and diadem ties hanging from a triangular knot behind. On top of the headdress is a branched finial. Apart from the peak, the overall shape of the headdress recalls the Parthian tiara (Curtis 1998). The king has a large beard and two strands of hair hang from behind his ear (the ear is not normally visible). The king holds a club in his right hand (with his first finger pointing forwards) and when facing left holds the hilt of his sword in his left; when facing right his left hand is not visible. Flames emerge from one of his shoulders. The same designs appear on most of his dinars (C.G1-ii, -iii, -iv and -v), but on a few he is shown wearing either a lower cap without ornament or just a diadem. On a few early dinars, flames emerge from both of his shoulders.

The weapons associated with the image of Wima Kadphises, particularly the club and the sword with a curved hilt, are clearly important symbols of royal power. They also feature prominently on the coins of Kanishka and Huvishka, and on the sculpture of Kanishka from the royal sanctuary of Mat, though the form of the club is different. The association of the club with Heracles and Oesho (in the guise of Śiva), and the rod or mace (daṇḍa) which symbolises the use of force as a foundation of rulership in Indian political theory, were all noted by Mariottini Spagnoli (1967). The curved pommel on the sword probably represents an animal, perhaps a bird, and there are many parallels across Eurasia for such a weapon (Mode 1997). It has even been suggested that a particular sword, a sort of royal heirloom, might be represented (*ibid.*, 552) or that an actual ceremonial mace might be represented in the Mat sculptures (Mariottini Spagnoli 1967, 257). This is possible, but doubtful; Wima Kadphises' grandfather is featured with a sword on some of his coins (A.C4-i ru) but on those the pommel is a dot or a bar. In any case, even if based on real ceremonial objects the function on the coins is symbolic, As discussed below (§C.5), the club is intended primarily to connect the king with the head of the Kushan pantheon, Oesho, whom the Kushans connected iconographically with both Heracles and Śiva.

On a unique double dinar die (C.G1-iv, obverse 2A) the king is shown in the usual dress, with the tunic and leggings visible under the overcoat, and no cloak, seated cross-legged on top of the mountain, holding the club and with flames on both shoulders, but with his left hand covered, an Iranian signifier of worship, also found in Buddhist art, where donor figures wearing the same dress as Wima Kadphises cover their left hands, in reliefs from Afghanistan (Errington 2002, 102–4; Rosenfield 1967, figs 94 and 98a). A second type, known from two dies (dinar C.G1-iii, obverse 1B; and double dinar C.G1-iv, obverse 4A) places the king seated on a low throne (shown with a back on the dinar) with his feet resting on a foot-rest. He wears the same costume and covered hand, but the club in his right hand is replaced by a small twig and the club rests by the right leg of the throne. A third single die (C.G1-iv, obverse 1A) shows the king in the same dress looking through a window, also holding the small twig, but with his left hand, and below his waist out of view. His quarter dinars (C.G1-iv) also show the king looking through a window, but only his head is visible and his right hand rests on the window ledge. He is either wearing the low headdress or just the diadem in this design. On his half dinar the king sits behind a parapet, and wears the same costume as on the double dinars, but wears a cloak even though facing left and has no flames (C.G1-ii). It has been suggested (Chattopadhyay 1967, 44–5) that the direction to left and right of the imagery represents a political gesture of confronting affairs to east and west, but the orientation of the images is determined by the administration of the mint, where two workmen were striking coins and their products were distinguished in this way (Bracey 2009).

Three representations of the king appear on dinars all struck from single dies. The earliest issue (C.G1-i) shows Wima Kadphises mounted in a chariot, accompanied by a diminutive charioteer. The figure of the king has the same characteristics as on his other coins, wearing an overcoat and tall headdress, with a club in his right hand. The chariot is drawn by two horses and has an umbrella open above the king's head. Chariots with umbrellas are known from both China (James 1988–9, figs 9–11, 13–15), as found in Xiongnu tombs (Miller 2012), and India (Errington and Cribb 1992, 162–4). It has also been suggested that this coin design is copied from Roman coins (Göbl 1968, 113; 1984, 13), but prototypes for the design in the art available to the Kushans are sufficient to explain the design. A double dinar with the same obverse design has also been reported (Bopearachchi 2008, 6, fig. 9), but its authenticity is not certain as its reverse

design of standing Oesho and the engraving of the inscriptions do not conform to the system of issues from the gold mint (Bracey 2009). The other two dinar (C.G1-iii) representations show the king on a low throne (see above), and the novel design of the king also on a throne, mounted on the back of an elephant. The only example of the elephant type is very worn, but appears to show the king in the same costume as on the enthroned type and also holding a club over his right shoulder.

On his copper coins Wima Kadphises is shown, in the same costume, standing frontally and making an offering with his right hand at a small altar which is next to a trident. His left hand rests on his sword hilt, with his sword inside his overcoat. To his left is the club, found on all his gold issues.

The imagery of these coins is complex and presents the king in many poses, but always dressed in the same costume. His beard, dress and headdress are identical to those which appears in the art of Parthian Iran, and present him as an Iranian monarch, in the same way as they do on the bust of the Parthian king Vologases III and the full figure sculpture of Uthal, the king of Hatra (Ghirshman 1962, 69, fig. 82, and 89, fig. 100). The trident by the altar on his copper coins is the emblem of the Kushan god Oesho. The club which he carries or has positioned nearby is the main attribute of the Greek god Heracles, whom the Kushans seem to have associated with their own deity Oesho. The flaming shoulders also seems to allude to the same deity, who is seen with a flaming halo on later Kushan coins (F.G1-ii and -iv, F.G2-ii, -iii and -iv). The placing of the king emerging from or on top of a mountain is yet another reference to Oesho, who is the god of high places (Humbach 1975; Tanabe 1991–2; 1997a). The whole imagery presents the king as a worshipper of the god Oesho and, because he shares some of the god's iconography, as his earthly embodiment. The other contexts in which Wima Kadphises is placed, on throne, on elephant and in chariot, all serve to indicate his kingship. The throne is similar to those on which contemporary Parthian rulers are often depicted on the reverses of their coins (Sellwood 1980, types 73.1, 74.1, 76.1, 77.1, 79.1); the elephant is the mount of the Indian king of the gods, Indra (Coomaraswamy 1927, pl. 27; Errington and Cribb 1992, 160–1), as well as an important military symbol for the Hellenistic kings whose coinage tradition was being drawn on; and the chariot can be associated with kingship in Rome, China and India. The elephant can also be understood as a reference to Oesho as he is depicted carrying an elephant goad on the gold coins of Kanishka I and Huvishka. Both the elephant and the umbrella can also be read as direct references to the status of Wima Kadphises as king when compared with the parallel on the gold coins of the Gupta king Kumaragupta who is portrayed riding an elephant and accompanied by an attendant holding an umbrella over him (Kumar 2017, 301–2).

The king making an offering at a small altar has been linked by Mukherjee (1960; 1969, 65–7) and Chattopadhyay (1967, 45) with representations of the same scene on the coins of the Parthian king Gotarzes II (AD 40–51). These coins have since been re-attributed to Artabanus II (AD 10–38) (Sellwood 1980, type 63.22) and Vologases III (AD 105–47) (*ibid.*, type 78.15). While these designs closely resemble each other, it is highly implausible that such small copper coins would be available as models to the Kushan die engravers. It is more likely that they are using a more generic image of ritual offering as available in Iranian art (Ghirshman 1962, figs 59, 60, 66, 86 and 116) and already known to the Kushans under Kujula Kadphises, as is shown on the early Kushan textiles from the Xiongnu graves at Noin Ula (Yatsenko 2012, 40, fig. 2).

An outline image of a figure in Kushan dress on the same rock as the Khalatse inscription may be intended to represent the king, but it adds nothing to our understanding of his imagery.

C.4 Wima Kadphises: forms of name and titles

The name of Wima Kadphises only appears in one inscription, written in Gandhari/Kharoshthi: the above-mentioned petroglyph from Khalatse (see §C.1 above; Skinner 8). On the Khalatse rock his name is spelt *uvima kathvisa*, suggesting the writer was not very familiar with the actual sound of his name. On his coins his name is spelt in a consistent way in Gandhari: *v'ima kathpiśa*, except on his first gold issue (C.G1-i), where the inscription appears to read *bima kathpiśa*, but the letters are very badly formed and it could be *vima kathpiśa* badly written. The character *v'i* differs from a regular *vi* by the addition of a foot to the character drawn to the right from the base of the upright. As discussed above this character-form appears to be an attempt to represent a *wi* sound matching the initial consonant, the Greek OOH, at the beginning of his name in Greek and Bactrian (Glass 2000, 98). The name of Wima Kadphises also appears in a birchbark Kharoshthi administrative document (Allon 2019), where the spelling appears to be *grema katap*[*h*(*s*)*a*], but, as on the seal of Wima Takto (see §B.4), the expected consonant *v'e* is written *gre* (or *gra* as Falk read it). Falk (2009) suggested for the Wima Takto seal that the *gra* is a miswriting of *v'e*, but Allon, who is publishing the Kharoshthi document, argues against the emendation and points to other examples of *v* being transformed into *g* in Gandhari (Allon 2019).

The consonant cluster *thpi* is clearly written on most of his coins and renders the syllable ΔΦΙ in the Greek version of his name, the aspiration shifting from the second to the first consonant. On some dies the lower vertical of the *pi* has a single line crossing and on others has an x shape across it, so that the *tha* component is either added at an angle as the x shape or its upright is taken from the upright of the *pi*. The x-shaped version is commonest on both gold and copper coins and is probably the intended form with the crossbar type as a die engraver's simplification. Some commentators (Bopearachchi 2008, 12–13) have read it as *pthi*, reading the cluster downwards, but the direction of conjuncture can also be upwards in Kharoshthi, as an initial *r* in a consonant cluster is invariably written across the lower part of the following sound, as in *rva* and *rma*. Whitehead read the cluster as *ṭhphi*, but there is no sign of the crossing line on the upright of the *pi* which would turn it into the aspirated consonant *phi*. Das Gupta (1958, 151–2) compared the cluster with *lpi* in later documents, but suggests that it should be read *ppha*, reading the x shape as *pha*, then adding the *i* vowel mark on the *p* in his tables (*ibid.*, 410, 440, table VII). Glass (2000, 132) refers to

Whitehead's reading, but bases his reading *lpi* on its occurrence in later documents, where the x shape forms the *l* sound. The reading *thpi* is also supported by the cluster *thvi* in the Khalatse inscription where the *th* is written in its normal form as an extension to the left of the foot of the *vi*. The Khalatse consonant cluster form is unique, hence its reading as *vthi* by Konow (1929, 79–81; Falk 2015a, 109, no. 91), reading the cluster downwards rather than upwards.

The form of Kadphises in the Gandhari inscriptions of Wima Kadphises can also be compared with those on the coins of Kujula Kadphises where the *t/d* sound always precedes the *p* sound (*kadaphsa*, *katakapha*, *kataphspa*) when the full version is given (other versions omit some of the sounds: *kaphsa*, *kaüsa*, *kasa* and *katsa*). In the new Kharoshthi document discussed above (Allon 2019) the extant letters of the second part of Wima Kadphises' name suggests a version of the *kadaphsa* used on some coins of Kujula Kadphises.

The Greek version of Wima Kadphises' name is spelt consistently on his coins as OOHMO KAΔΦΙΣΗΣ, a more stable version of Kadphises than on his grandfather's coins. The Bactrian version in the Rabatak inscription is OOHMO KAΔΦΙΣΟ, i.e. with the same spellings used for his father and grandfather in the same inscription.

In many publications the first part of the name of Wima Takto and Wima Kadphises are spelt Vima, but here the spelling Wima is used because of the *v'ima* in the inscriptions of Wima Kadphises, where a more accurate version is attempted by the die engraver than the *vima* or *vema* found on the coins of Wima Takto. The Bactrian OOHMO also suggests the same *w* sound because in Bactrian the sound *v* is rendered as B in the transcription of Vasudeva as BAZOΔHO and Vishakha as BIZAΓO on coins. On some coins the *v'i* letter has a z shape, which has prompted some to read it mistakenly as *hi* (Chattopadhyay 1967, 43). Similar creativity in the rendition of non-Indian sounds has also been remarked on by Tandon in relation to the Western Satraps (Tandon 2009b, 173).

In the above sections on the names of Kujula Kadphises and Wima Takto (§A.4 and §B.4) the origins of the two components of Wima Kadphises' name have been discussed following the insights presented by Sims-Williams (2002, 236–7). If his suggestion that Wima relates to the Iranian words for 'rock' is correct then his depiction emerging from or seated on mountain-top rocks could represent an allusion to his name as well as to the Kushan god Oesho.

The title borne by Wima Kadphises in both the Khalatse and Rabatak inscriptions is king (Khalatse *maharaja*; and Rabatak ÞAO). A Jain inscription from Mathura dated year 299 (Skinner Yavana era 4), probably in the Greek era, with the royal and imperial titles *mahārāja rājatirāja* in Epigraphical Hybrid Sanskrit/Brahmi also appears to be attributable to his reign, as it is in the style of the inscriptions in the name of Kanishka I, but does not use the Kanishka I era.

On the coins he has either royal or imperial titles in both Gandhari and Greek. There is no distinction in status or time between the two titles as on most of the gold he is king in Greek on the obverse and king of kings in Gandhari on the reverse so the variations did not have a political function. Alongside these titles he also used the ΣΩTHP MEΓAΣ Greek title of his father on the obverse of all his copper coins and third phase gold coins, with only the first part in Gandhari *tradara* on the reverse of all his coins. In the Gandhari inscriptions on his coins he had additional imperial titles drawn from earlier local usage, *mahiśvara* (or *mahaiśvara*) *sarvaloga'iśvara* (great lord, lord of all places). These are expansions of the title *iśvara* used by lesser local rulers (Cribb 2014, 88–9), as in the inscription by the Odi king Senavarma and in inscriptions and on coins of the Apraca kings (see **Fig. 2.16**), where it is spelt *iśpara* lord (Baums 2012, 212, no. 13, 216, no. 17, 227, no. 24; Senior 2001, type 178). On the newly discovered birchbark Kharoshthi document his titles can be reconstructed from the various mentions of him in the list of donations. He is given the imperial title *maharajasa rajatirajasa* and the additional titles *devavranasa svayab*[*h*]*alasa*. Allon reconstructed his full title and name as *maharaja*s̲*a rajatiraja*s̲*a devavranasa svayabalasa maharaja*s̲*a gremakataph*[*s*]*a*s̲*a* (Allon 2019), and linked the title *devavrana* with the title *devavrata* used by the Indo-Parthians (Senior 2001, Gondophares types 215–20 and 222 and Sasan types 241 and 242) and translates it as 'having fortune/splendour through the gods'. He also suggested that the title previously read as *detriasa* in the Kamra inscription could also relate to this title, if read *de*[?]*vatasa*, or as Baums has read it *de*[*bra*]*vadasa* (or perhaps it should be read *dedvaätasa*?). The title *devavrana* can also be linked with Kanishka I's title in the Rabatak inscription AΓΓAΔΔIΓΓO meaning fortunate (see §D.4 below). Allon also compared the title *svayab*[*h*]*alasa*, which he translates as 'who is his own army' with that of Vasishka in the Kamra inscription (see §H.4 below) and the use of the same title *svayaṃbala*s̲*a* in one of the Endere inscriptions found by Christopher Baumer and edited by Salomon (1999, 3). It can also be compared with Kanishka I's title XOAZAOAPΓO (self-powerful, i.e. autocratic) in the Rabatak inscription (§D.4).

C.5 Wima Kadphises: religious connections and imagery

The prominence of Oesho on the coins of Wima Kadphises has often prompted the mistaken view that he was a Shaivite (Chattopadhyay 1967, 36–49; Harmatta 1994a, 318–20; Foltz 2010, 45), through the identification of the image of Oesho with Śiva. The imagery of Kushan Oesho was constructed by Kushan die engravers from an amalgam of imagery from Greek Heracles and Indian Śiva, together with additional elements. The god Oesho on Wima Kadphises' coins owes much to the imagery of Śiva, more so than on the coins of his successors. His ithyphallic nakedness, water pot and three-headedness, and his association with a bull are all features on Indian images of Śiva of the Kushan period (Perkins 2007). The trident on Wima Kadphises' coins, the thunderbolt and ankus on Kanishka I's coins, the flaming halo on Vasudeva I's coins, and the rare examples of Huvishka where he also carries a club or wheel, are all imagery peculiar to Oesho, but later assimilated into Indian Shaivite iconography (Cribb 1997a). Another image of Oesho on a so-far unique coin of Wima Kadphises (C.C1-misc) shows a two-headed image in the form of a *dvimukhalinga*, two-faced linga, with a bearded and beardless face on either side. This coin has been misdescribed as a

joint issue of Soter Megas and Wima Kadphises on the basis of the misidentification of the trident held before the young-faced side of the linga as the form of tamga on the Soter Megas coinage, so prompting the misidentification of the two faces as those of these two rulers (Chattopadhyay 1967, 51–2).

As shown above the imagery of the king also associates him with the god Oesho, through his association with the trident and club on many of his coins and his depiction within or on a mountain. The interpretation of these attributes of the king has been used to identify him as a Shaivite and the Shaivite imagery of the reverse showing Oesho naked, ithyphallic and with a bull are given priority in such views. This misunderstanding of Wima Kadphises' use of Oesho on his coins has also prompted the misinterpretation of his Gandhari titles *mahiśvara sarvaloga'iśvara* (great lord, lord of all places) as references to his cult of Śiva under the name Maheśvara (Chattopadhyay 1967, 39; Göbl 1984, 60; Harmatta 1994a, 319; Bopearachchi 2008, 44). The other associations with Śiva discussed by Harmatta (1994a, 318–20) cannot be given any credence as they are based on his misreading of Bactrian inscriptions (Harmatta 1994b, 418–28). There is no evidence to suggest that Wima Kadphises had been converted to Shaivism, but all the evidence of his coins points to his role in the Kushan religion as making an offering to the god Oesho who bestowed kingship on him, and his adoption of the flaming shoulders and mountain-top imagery of Oesho to articulate his authority. Zeymal (1997a, 260) proposed an interpretation of Wima Kadphises' representations of Oesho, which suggested the adoption by Wima Kadphises of a specific cultic aspect of Shaivism, and compared it with an alternative cultic aspect under Kanishka I and Huvishka, which was again replaced by Wima Kadphises' version under Vasudeva I. This interpretation seems to be an over-reading of the differences between Oesho's depiction on the coins of these rulers, where the decisions about the representations of Oesho would be under the direction of die engravers and the officials in charge of the mint, rather than the king.

The recently discovered fragmentary list of donations among the birchbark Kharoshthi documents mentions Wima Kadphises as a donor (Allon 2019). Apart from the king's name and titles together with the value of his donations, the document tells us nothing about the purpose of the donations or the relationship between the donor and recipients. The nature of the birchbark documents places them all within the Buddhist community, so it is plausible to deduce from these fragments that Wima Kadphises was a donor to the Buddhist community. It cannot be inferred from this that he had become a Buddhist.

C.6 Wima Kadphises: contemporaries and international contacts

The events recorded by the *Hou Han Shu* of Kushan interference in the royal succession at Kashgar during the reign of Wima Kadphises (see §C.1 above) indicate that the Kushan empire continued to actively assert its interests in the Tarim Basin. From the arrival of the Chinese general Ban Yong and his army in the region, Chinese sources assert the re-establishment of Chinese control over the city states, and presumably the limitation of Kushan authority. However, we should be cautious in interpreting this, as the information in Chinese annals derives from generals whose success was measured in part by their exclusion of Kushan influence, and at least in the city of Khotan the Kushans continued to exercise some authority (see §D.6 below). Otherwise there are no accounts of the Kushan relationship with China during this reign. The sending of an envoy to the Roman emperor Hadrian (Falk 2015a, 115) may have taken place during Wima Kadphises' reign, but we know nothing of its purpose or precise date. There is no other evidence of his international relationships. The hypotheses presented by Robert Göbl (1984, 59) that, during his reign, Roman mint workers arrived from Alexandria and helped set up his gold mint and that Wima Kadphises' coins copied 3rd-century AD Roman coins (Göbl 1999, 157) have been convincingly deconstructed by Sinisi (2017). The proposition often voiced that the gold for making Kushan coins came from the trade with Rome and that Roman gold coins were melted down to make them has also been disproved by comparison of trace element analyses of their gold content with those of Roman coins (Blet-Lemarquand 2006).

Gupta drew attention to a very interesting copper example of Wima Kadphises (Gupta and Kulashreshtha 1994, 94–5, fig. 1), found in an excavation at Vaisali between 1958 and 1962 (reported in the relevant years of the *Indian Archaeology Reviews*: Ghosh 1959, 12; 1960, 15–16; 1961, 6; 1964, 5–6; early excavation discussed in Deva and Mishra 1961, and coin finds in Singh 1985; Gupta and Kulashreshtha 1994, 94–5, fig. 1). A typical example of Wima Kadphises' copper tetradrachms (C.C1-ii 1u), the coin had been countermarked on both sides by an S-shaped device, a device known to have been used by the kings of Choresmia. Russian exploration of ancient Choresmia (Khwarezm) began with S.P. Tolstov in the 1930s. During his surveys Tolstov found five countermarked Kushan coins, amongst some 300 pre-Islamic coins (Field and Prostov 1939, 164; Tolstov 1968, 313). Others have been found since; Henning (1965, 169) remarked on 22 copper coins of Wima Kadphises, Kanishka I and Vasudeva, and the S-shaped tamga countermark is common on copper types from Wima Kadphises to Huvishka. The excavation of these countermarked coins in Choresmia indicates where they were countermarked. Local coinage, on which the same symbol is used, gives us some sense of when.

Vainberg has produced a catalogue of the early coins of Choresmia (1977, English summary 2005), and the S-shaped tamga is introduced on the reverse of silver and copper coins of a king Atramush (his types Б III and Б IV). These coins derive from a series of imitations of the Bactrian king Eucratides but by this time the portrait has been replaced and the reverse features a single horse rider, resembling that of the Indo-Scythian/Indo-Parthian series, surrounded by a local Choresmian inscription. In this sense they follow a very similar developmental path to the northern coins of Kujula Kadphises (A.S2-i). Vainberg suggests broadly that these were probably issued in the 2nd century AD, and that in the 3rd century the S-shaped tamga was replaced with a further development.

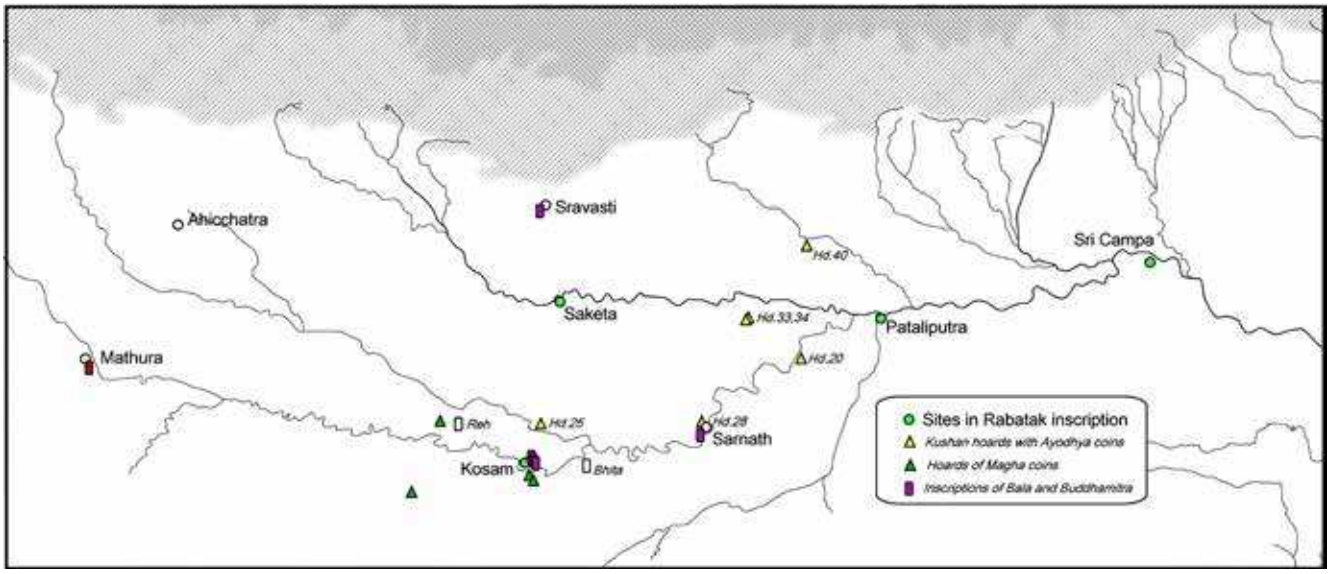


Figure 2.25 Map of the Gangetic valley in the reign of Kanishka showing sites named in the Rabatak inscription and mixed hoards of Mitra (Ayodhya) and Kushan coins, Magha coins and the inscriptions of Bala and Buddhamitra early in the reign of Kanishka I

Choresmia presents, like Sogdia, an interesting mixture of pastoral nomadism and settled agriculture. The fortified sites of various sizes fall within an irrigated landscape, but the size of the irrigated zone is small and the pastoralist population must greatly have exceeded that supported by agriculture. Tolstov felt the local state was deeply connected with the Kushans. Dated material survives, in an era that must be earlier than the AD 304 al-Biruni suggests, and which Tolstov (1968, 318–19) wanted to connect to Kanishka's era (see §D.2). Henning deferred, wanting to place the era closer to our dating of the Azes (Henning 1965, 168–9).

It does not matter a great deal; the export of Kushan copper in the 2nd century, and clearly its return in some cases, is clear evidence of exchange. It is unlikely that this was a mass export caused by the devaluation of Huvishka's copper coinage as is seen in the Gangetic valley (see §D.1.1 below and Ch. 3 §D.7). The Vaisali find could not have re-entered the Kushan empire to begin its journey to eastern India if it had been effectively demonetised and the general pattern is dis-similar to the Gangetic one. More likely Kushan copper began to be exported as a result of either economic or political factors early in the 2nd century and continued into the 3rd. Unfortunately, while Choresmian studies have often engaged with Kushan literature, the practical problems of language and availability, as much important Choresmian literature is in Russian, has meant the reverse is not true.

D.1 Kanishka I, c. AD 127–51: historical account

The Rabatak inscription, written after his sixth year, describes Kanishka I's campaigns into India (YNΔO) in years 1 to 6 of the Kushan era (Sims-Williams 2004, 57, line 19), reaching as far as modern Bihar (**Fig. 2.25**).

> In the year one there was *proclaimed to the cities of the *kṣatriyas/*ksatrapas, the capture (of) …, and …, and Sāketa, and Kauśāmbi, and Pāṭaliputra, as far as Śrī-Campā; whatever (cities) he and the other *generals *reached, (he) submitted (them) to (his) will, and he submitted all India to (his) will (Sims-Williams 2004, 56, lines 4–7).

The inscription claimed submission, or conquest (?) of a number of identifiable cities including Saketa (ΣΑΓΗΔΟ, Ayodhya in Uttar Pradesh), Kausambi (ΚΩΖΑΜΒΟ, Allahabad in Uttar Pradesh), Pataliputra (ΠΑΛΑΒΟΤΡΟ, Patna in Bihar) and Sri Campa (ΣΙΡΙ ΤΙΑΜΒΟ, Bhagalpur in Bihar), and an unidentified city (ΩΖΟΠΟ), and perhaps another illegible at the edges of the inscription. A silver plate (Sims-Williams 2015) also describes Kanishka I conquering India (YNΔO):

> then he conquered (/) India and I was a trusted (?) servant in his work … When the king of kings, the son of the gods, [returned] from India to Tokhwarstan in the tenth year with the spoils(/) of victory(?) (lines 3–4).

The submissions, conquests and victory described in these inscriptions confirm an extended military campaign under Kanishka I in which the king himself took part. A passage in the Tibetan version of a chronicle of the Central Asian city of Khotan (the *li-yul-gyi-lo-rgyus*, Petech 1968), offers some confirmation of the reports from these inscriptions, as it described a military campaign of Kanishka I, in alliance with the Khotan king Vijayakirti, into India to capture the city of *So-ked*, which seems to correspond with the capture of Saketa (ΣΑΓΗΔΟ) in the Rabatak inscription.

Interpreting these documents as evidence of Kushan rule, rather than military campaigning, in northern India beyond Mathura is more problematic. The continuing currency of the coins of the local kings of Saketa/Ayodhya alongside Kushan coins (Sharma 2012), suggests that this conquest did not result in a Kushan administration, because in all the places the Kushans administered there were issues of coins acknowledging the Kushan ruler completely replacing local types (**Fig. 2.26a–b**). The same is true of Kosam, where local Magha coins continued during the Kushan period (see below). The evidence for Kushan rule in Mathura is based on the presence of a Kushan mint in the city and the location of a Kushan royal shrine at Mat on the outskirts of Mathura (Rosenfield 1967, 138–51). There is no evidence of this kind

Figure 2.26a–b Copper coins of Satyamitra and Aryamitra, kings of Ayodhya in northern India (U.P.), with goose and palm tree/ bull and standard, the type found in hoards with Kushan coins, (a) BM 1894,0507.1518, 6.27g, 19mm, b) BM 1894,0507.208, 6.79g, 19mm). They were made with similar technology to the coins of the Kushans, so they may have passed as half units

beyond Mathura, so it seems likely that the 'submissions' recorded in the Rabatak inscription did not lead to direct rule of any of these cities by the Kushan kings. In any case the Rabatak inscription draws no distinction between Saketa on the Kushan border and the far distant Sri Campa. If it were evidence that one was incorporated in the Kushan empire, the same should be true for the other. The nature, objective and result of Kanishka's campaign remain unclear but it is important to resist the temptation of over-reading evidence of military campaigns whose nature and objectives we cannot know (see also §D.6.1 below).

The campaigns of Kanishka I recall the references to Yavana, i.e. Greek, military activity in northern India described in the *Yuga Purāṇa* and in Patañjali's *Mahābhāsya*. These texts refer to campaigns reaching Saketa and Madhyamika (Chitor in Rajasthan) (*Mahābhāsya* 3.2.111) or Saketa and Pataliputra (*Yuga Purāṇa* 88–9) (Ghosh 2017, 109–11). These references are usually interpreted (Majumdar 1977, 172–3; Narain 1957, 84–6) as military activities of the Indo-Greeks in the 2nd century BC, but, given the looseness of the use of the term Yavana in Indian literature and inscriptions (Ghosh 2017, 101–7; Parasher 1991, 224–8), it seems just as likely that these relate to Kanishka's campaigns. The notion that Patañjali should be dated to the 2nd century BC because his record of the Yavana campaign into northern India took place recently (Mookerji 1951, 96–7; Ghosh 2017, 109), belies the nature of his text in which sentences and phrases are used to illustrate grammatical usages.

A more compelling reason for dating Patañjali in the 2nd century BC, however, is his reference to Puṣyamitra, a 2nd-century BC ruler. Puṣyamitra appears in the 5th-century AD play *Mālavikāgnimitra*, where his grandson fights a battle against Yavana cavalry near the Indus (5.149: Balogh and Somogyi 2009). This suggests a persistent historical tradition of conflict, possibly with the Indo-Greeks. It has been argued that writers of grammars subtly alluded to their patrons (for references see Pollock 2006, 169) by including them in illustrative phrases praising some achievement (in this case a horse sacrifice). Such a practice could have been well established in Patañjali's time, in which case the text (and the Yavana reference) probably should be dated to the 2nd century BC, or it is equally possible that Patañjali is simply quoting an earlier source, in which case the text might be centuries later and 'Yavana' could refer to any north-western, or even western dynasty, including the Kushans.

Considerable scepticism and caution must be applied to these various references. Though they undoubtedly preserve historical traditions, they do so in different places and at different times, and in all but the *Mālavikāgnimitra* are shorn of any meaningful context. It is therefore important to reject attempts to reconstruct historic events from these scattered references, either assuming that they all refer to one campaign, or each to distinct events (Ghosh 1946).

One has to be cautious of using lexical examples as evidence of historical fact; in the same way as we easily recognise the lack of value for Roman history of Samuel Johnson's quotation of Shakespeare's *Julius Caesar* in his definition of elephant, surely the Sanskrit texts are an equally poor basis for dating either the Yavana military expedition or Patañjali (Johnson 1755, vol. 1, 682).

Mathura remained an important centre for the Kushans at least until the reign of Vasishka, as there are inscriptions from the city which refer to him by name in dating formulae, and the city contains the ruins of a royal shrine with images of Kushan kings. Kushan mints were also active there in the reigns of Wima Takto, Huvishka and Vasudeva I. The coin finds from Herbert Härtel's (1976; 1993, 309) excavations of the Sonkh site at Mathura (Narain 1988; Gupta 1988a; Ray 1988), when reviewed alongside the inscriptions found in the vicinity (Lüders 1961; Shrava 1993), reveal a city under continuous Kushan control from Wima Takto until the reign of Vasishka.

Kanishka I's conquests were also referred to in Buddhist narratives, but often with fantastical details, recalling the stories of Ashoka's military campaigns, so lack historical veracity. The stories were reported by Chinese Buddhist pilgrims who had visited India (Faxian's account: Zürcher 1968, 374–5; Song Yun's account: *ibid*., 377; Xuanzang's account: *ibid*., 382), and in Buddhist moral stories (Zürcher 1968, 385). The same sources also indicate Kanishka I's military activities in the Xinjiang region which had been under intermittent Chinese control since the 1st century BC, taking hostages from the city states (*ibid*., 377 and 382).

Finds of Kanishka I's coins in Inner Asia give some indication of his activities in the Tarim Basin, where his Kashmir mint coins have been found in the Khotan region, and the local Khotanese currency, known as 'Sino-Kharoshthi' coins, adapted Kujula Kadphises' coin designs, overstruck the Su Hermaeus imitation coinage (A.C7A-ii) of the early Kushan period and based their denomination system on early Kushan copper tetradrachms, drachms and hemidrachms (Cribb 1984b, 151; 1985d, 141, 146). Khotan was the first large city on the trade route from Kashmir into

Xinjiang, so the finds of coins could represent heavy traffic on this trade route or a Kushan military or administrative presence. The links between the Kushan empire and Khotan are also reinforced by the passage in a chronicle of Khotan mentioned above.

The coins issued by Kujula Kadphises in the Indus valley (perhaps Sind) were not followed by any further production under later kings. The only other evidence of Kushan rule in the region is the Sui Vihar inscription which has a date in the year 11 of Kanishka, from (near Bahawalpur, Skinner 166; CKI 147). Skinner takes this to be from the period of Kanishka II following van Lohuizen-de Leeuw (1986, 7) who based her remarks on its well-developed Sanskrit. The dedication tentatively suggests that the Kushans continued to hold sway over at least part of this region after the end of Indo-Parthian rule in the area.

Southern Afghanistan, i.e. Arachosia (Kandahar) and Seistan, is often included in maps of the Kushan empire, but it is not clear how much of this region was under Kushan control. Kanishka I coins are sufficiently represented among what are said to be local finds in the Kandahar Museum to suggest that the city was under Kushan control at this period (MacDowall and Ibrahim 1978). However, like Sind and Baluchistan the reconstruction is complicated by a lack of evidence, and by the need to place both the rump Indo-Parthian kingdom, which issued coins in this region until the early Sasanian period (Alram 2007, 234–5), and the contemporary Paratarajas (**Fig. 2.27**) (Tandon 2009a) in the same area.

The extensions of the Kushan empire achieved during the reigns of Kujula Kadphises, Wima Takto and Kanishka I, to embrace the territories of south-western Uzbekistan, south-eastern Tajikistan, Afghanistan, northern Pakistan, Kashmir and north-western India, held until the establishment of the Sasanian empire in AD 223. Sasanian incursions soon after started to erode Kushan rule north of the Hindu Kush and during the following decades also encroached on Kushan territory in central Afghanistan and Pakistan south of the Hindu Kush. It is thought that in the time of Kanishka I the boundary of Kushan rule in south-eastern Uzbekistan is marked by the fortifications at the Iron Gates near Derbent (Rapin 2007, 62–3).

The Rabatak inscription also articulates another event early in the reign of Kanishka which established a new official language for the Kushan empire. The inscription is in Bactrian and includes in line 3 a reference to the move from Greek to Bactrian: 'And he issued a Greek edict and then put it into Aryan' (Sims-Williams 2004, 56). Aryan, i.e. Iranian, is the contemporary name for the Bactrian language and reflects its east Iranian characteristics. This change can also be observed in the coinage, where the dies of Kanishka's first issue (D.G1-i) were altered so that the Greek inscriptions were replaced by Bactrian ones. Bactrian had already been used in the Dasht-e Nawar inscription, an official Kushan inscription in the name of his grandfather Wima Takto, and is also seen on one of his coin issues (B. C6-i) and on two issues of the first Kushan king Kujula Kadphises (A.C2B-ii, A.C5-i), so Kanishka I's action gave the language an official status rather than introducing it for the first time.

Figure 2.27 Copper coin of Koziya king of the Paratas, Baluchistan, c. AD 225–60, (BM 1860,1220.553, 3.82g, 20mm).
Parata copper coins have been reported overstruck on Kushano-Sasanian coins of Hormizd I

D.1.1 Kushan copper coins of Wima Kadphises, Kanishka I and Huvishka found in northern India

Kanishka I's coins found in India beyond Mathura do not seem to relate to his campaigns, but are part of the major export of Kushan copper coins in the second half of the reign of Huvishka when the official coinage was reduced in weight, so older heavier coins could no longer be part of the official currency in Kushan territory. They are normally reported in hoards containing Wima Kadphises, Kanishka I and Huvishka coins found right across northern India as far as Bengal (Sharma 2012; Basu Majumdar and Ahamad 2010). Imitations of them (see Ch. 3 §D.7) were also made in the same regions (Cribb 1985b; Jongeward and Cribb 2015, 243–50). Such hoards have been reported from most parts of Uttar Pradesh (Prasad 2014, 79–121). An analysis of the many archaeological finds of Kushan coins (Prasad 2014, 117–20) needs to be made in the light of these exports of demonetised Kushan coins into areas where they were not the official currency, so that any patterns of genuine official circulation can be detected. If such official circulation could be demonstrated then it could provide evidence of Kushan administration in the regions to the east beyond Mathura.

The presence of copper coins among archaeological finds and hoards can often be interpreted as evidence of local rule by the coins' issuers as in the case of the finds from Begram (Cribb 2021) and Taxila (Khan 2007a), but this is not a fixed rule as is easily demonstrated by the large quantities of Roman copper coins found in South India (Krishnamurthy 2007) and Sri Lanka (Walburg 2008, 51–84). At present the hoards, containing Wima Kadphises, Kanishka I and Huvishka coins, can only be interpreted as evidence of an outflow of coins from Kushan territory due to Gresham's Law (Sargent and Smith 1997), whereby the reduced weight coins of Huvishka drove out of monetary use the earlier heavier, now undervalued, coins. Gresham's Law, in terms of pre-modern monetary systems, represents an observation that there is an imperative created when states reduce the metal content of coinage, either by reducing the fineness of gold and silver or by reducing the standard weight; the new coins cause the previous more valuable coins to be withdrawn from circulation as they are undervalued when counted at face value in terms of the new currency system. The removal from circulation can take place in various ways, such as the official withdrawal and melting of the old coins to make new ones at a profit, the hoarding of them as a store of the metal they contain, or their export as bullion.

If the hoards represented a local Kushan administration operating a Kushan monetary system in northern India, then it is puzzling that the coins found there are all issues from the mint at Begram, and that there was no supply from a nearer mint. The more-than-twenty reported hoards (CSH: see nos 17–48) were all closed during the reign of Huvishka when Wima Kadphises, Kanishka I and Huvishka coins circulated together, and never in the earlier reigns nor in the second half of Huvishka's reign or later. The currency of these heavy Kushan coins in northern India is only consistent with their import into the region after the reduction of weight standard at the Kushan mints midway through the reign of Huvishka, when they were no longer current in Kushan territory west of Mathura. The wear exhibited by these heavy coins suggests that they were in circulation for a long time after they had been taken out of use in Kushan territory further west.

D.1.2 Material evidence and political allegiance/ autonomy

Drawing political boundaries is a complex historiographic problem and the discovery of the Rabatak inscription has complicated rather than resolved the issue for the Kushan period. This is particularly problematic for the history of northern India in this period (Chakrabarti and Makkhan Lal 2014, 35). Part of the problem is that the realities of political control, the ability to levy manpower, goods, taxes and to administer daily life, leave only limited material remains. The other element of the problem is that political administration falls on a continuum. A state might claim authority which is unacknowledged by those over whom they claim it, as for example the Chinese claim over the Kushans, or a state might be able to demand military support, as for example the *Prophecy of the Li Country* suggests Kanishka could demand of Khotan (Petech 1968, 244), but have no permanent presence or direct control over what amounts to a subordinate ally. At the other end of the spectrum a local ruler might be left in place to carry out day-to-day administration, but with taxes remitted to the centre and a garrison in place the ruler's authority would be purely nominal. The latter may be what happened to the kings of Odi or to the satraps of Mathura under the Kushans.

To illustrate this problem it is useful to compare two relatively well-attested archaeological sites in the Kushan period: Mathura and Sanghol. In the case of Mathura there is no question that it formed part of the Kushan state from before the reign of Kanishka (AD 127–51) until late in the reign of Vasishka (AD 246–67), while at Sanghol, though it is frequently assumed to be ruled by the Kushans, the evidence simply does not give any indication of political control.

Coins provide limited support for Kushan rule at Mathura. The mints, under Wima Takto (B.C4), Huvishka (E.C4), and possibly Vasudeva I (F.C2), which are attributed here to this city are so attributed because the characteristic types of these mints are commonest in its vicinity and other evidence suggests the city was under Kushan rule (see Ch. 3 §B.2, §E.5). There is nothing intrinsic to the coins of this mint to identify them with the city, unlike Balkh and Begram mints, both of whose identification with those cities comes directly from coin evidence (Bracey 2012a). A Kushan mint definitely operated in the general area, suggesting direct Kushan rule, but it is not certain it was located within the city of Mathura itself.

More substantive is the long series of private Brahmi inscriptions including the name of the kings in their dating formula, from Kanishka to Vasishka, but which mention no other local rulers (Shrava 1993; Skinner 2017). In addition there is the existence of a royal shrine at Mat to the north-east of the city which features sculptures of the kings, from Wima Takto to Huvishka (Rosenfield 1967, 138–48). This demonstrates the capacity of the Kushan court to build and maintain structures near the city as well as to influence dating practices, and the acknowledgement by the local population of Kushan authority.

Unfortunately, relatively few cities had mints which we can independently localise, and no city of the Kushan period has the level of archaeological evidence available at Mathura. A good example of a Kushan period settlement without evidence of a Kushan administration is provided by the major town of Sanghol, located in the Punjab, about half way between the cities of Taxila and Mathura, both of which had been incorporated in the empire since the reign of Wima Takto. The site is best known for its Buddhist stupa, and particularly for the sculptures imported from Mathura. The sculptures were stored nearby during the construction work but never used. It is normal to assume that Mathuran work in this style dates to the period of Kanishka, though there is much uncertainty of the dating (Bracey 2018, 144–5), and if so then the town was clearly very active during the Kushan period.

To the north-west of the stupa, on a slight rise, a complex of buildings apparently administrative in character (often described as a *hathiwara*, 'palace' or 'fortress') was excavated. The area was fortified, though it is unclear if it was for general security or military purposes. There are a number of seals and sealings, many of which refer to officials (*senapati*, *dandanayaka*, *mahadandanayaka*, are amongst the titles) rather than private individuals, but only two kings are mentioned. One seal refers to the Indo-Parthian king Gondophares (*rajadirajasa tratarasa gudupharasa*), and another to an otherwise unknown Kapila (*Śri Maharaja Kapila*). One room in that complex contained both a furnace and a set of terracotta moulds for Kuninda coins. This has been interpreted as a mint (Michon 2010a; Ray 2010b, 187) and, if official rather than forgers' tools or a local administration's supplement to the current coinage, suggests rule by the Kunindas in the early 1st century, before the Kushans.

Despite the lack of compelling evidence for Kushan activity (no minting, no seals, no inscriptions acknowledging them) most writers have taken it as given that Sanghol was incorporated in the Kushan state and subject to a Kushan-appointed administration (Margabandhu 2010, 109). It is equally possible that the site remained under the control of the Kunindas perhaps in a more or less nominal feudatory relationship. And if it is accepted that Sanghol was ruled by a state which has not left material evidence at the site there seems to be no obvious reason to select the Kushans over the Yaudheya. Traditionally, Yaudheya coinage has been split, with the assumption of pre-Kushan series and post-Kushan series. Historiographically this was more defensible when it

was assumed Kushan rule in India was limited to the period from Kanishka to Vasudeva, less than a hundred years, and Kanishka was himself dated much earlier. The discoveries of Yaudheya seals, as well as the massive imitation of their coins, at Sunet and Rohtak, and the testimony of Rudradaman that he defeated them, suggests they ruled independently throughout the 2nd century and their coinage should be seen as broadly continuous. And as seals and coins survive for the Yaudheya which do not acknowledge the Kushans they must have remained in practical terms independent. If so, they, and not Kanishka I, might have exercised authority at Sanghol.

This example illustrates once more the problem of employing the Rabatak inscription as a guide to the extent of Kushan rule, something the inscription itself does not explicitly claim. The Rabatak inscription is part of a genre of testimonial inscriptions used by kings. It serves the same purpose as the inscriptions of Ashoka, the Hathigumpha inscription of Kharavela (Kant 2000), the contemporary Junagadh inscription of Rudradaman, the Kaʿba-ye Zardošt of Shapur I, and the Allahabad pillar of Samudragupta, to praise the king's prowess and achievements. And like those inscriptions, which also record military campaigns or claims to rule, the claims themselves should be treated with scepticism. The inscriptions do not exist to record the mundane facts of administrative authority but rather set down within a religious framework the already assumed facts of the king's greatness. In this respect they dedicate the king's actions to the gods who made them possible, while pandering to the ego of the king. The latter point is apparent in the Rabatak inscription, which is strangely silent on the achievements of Kanishka's ancestors, or in the Hathigumpha inscription which would have us believe that Kharavela conquered most of northern India without apparently leaving trace of his existence outside the inscription itself.

D.2 Kanishka I: problems of chronology

The problem of Kanishka I's chronology has been of very long standing, with suggestions for his first year ranging from *c.* 90 BC to *c.* AD 278 (Bracey 2017). Recent scholarship developed a growing consensus that the first year of the reckoning in which inscriptions naming him (from the years 2 to 23) was *c.* AD 127, first proposed by Harry Falk (Falk 2001a; Cribb 2018a). The historiography of this debate is complex and the evidence substantial so only a brief summary is given here.

The Rabatak inscription, lines 2–3, makes it explicit that Kanishka I founded an era as it says 'Kanishka … inaugurated the year one as the gods please' (Sims-Williams 2004, 56) and the many dated private inscriptions show this era continued beyond the end of his reign as an era of the Kushan kings, rather than as a reckoning of his reign, which reached its 98th year towards the end of the reign of the sixth Kushan king, Vasudeva I. The close chronological relationship between the first four Kushan kings is indicated by the succession recorded in the Rabatak inscription, and that between Kanishka, Huvishka and Vasudeva I is established from the dated inscriptions, and confirmed by coins. These relationships have allowed a great deal of evidence to be brought to bear on the problem. The evidence already available by the 1960s had already led to a strong consensus that the era must commence in the last quarter of the 1st century or the first half of the 2nd (Basham 1968). The narrowing of that range to year 1 equalling AD 127 is both supported and complicated by the discovery in an ancient Indian astrological text, the *Yavanajātaka*, of a means of calculating the start of an astrological cycle through a comparison of the Śaka era beginning in AD 78 and a Kushan era beginning 149 years later, i.e. in AD 227. Most interpreters have assumed this refers to the second sequence of dated private inscriptions starting about one hundred years after Kanishka I, and thus dates the beginning of his era to AD 127. However, a minority position in scholarship had always favoured a 3rd-century date (Bhandarkar 1892, 380, 385–6; Zeymal 1968; 1970; Göbl 1984; 1993a; 1999), and so it is unsurprising that the new evidence was used to date Kanishka I's inauguration of the era to *c.* AD 227 (Schindel 2011, 6).

The problem with equating the Kushan era in the *Yavanajātaka* with an era of Kanishka I commencing in the 3rd century arises from the gap it would create with those dates in the Azes and Greek eras. As discussed above (§A.2; B.2; C.2), dates for Kujula Kadphises, Wima Takto and Wima Kadphises survive in these earlier eras, which are also used in inscriptions naming their predecessors, such as the Indo-Parthians. Positioning the reigns of Kujula Kadphises, Wima Takto and Wima Kadphises immediately before the first year AD 227 of the Kushan era in the *Yavanajātaka*, would move them into the second half of the 2nd to early 3rd century AD, a position not compatible with the references to Kujula Kadphises and his son in the reports of Ban Yong made in AD 125 (*Hou Han Shu* 118.9a), probably based on information from before AD 103, and opening an unacceptable gap between the Kushans and the dynasties which preceded them.

Falk's view that the *Yavanajātaka* was referring to a second Kushan century places Kujula Kadphises and his immediate successors in the second half of the 1st century and early 2nd century AD, a period far more compatible with the Chinese source. The main evidence that a second reckoning existed comes from the inscriptions of a king called Vasishka (§H.2), who is referred to in inscriptions dated years 22–30. Originally the inscriptions were understood as relating to a co-ruler of the Kushan kings Kanishka I and Huvishka (and such opinions persist Mukherjee 1998, 28–9; 2004, 246–7; Chakravarti 2014, 52; Agrawal 2014, 331–2), but the discovery of coins in the name of Vasishka (Göbl 1965), which were issued after Vasudeva I, demonstrated that Vasishka was not a contemporary of Kanishka I and Huvishka. Associated closely with the coins in the name of Vasishka were coins in the name of Kanishka and Vasudeva which were clearly later than those of Kanishka I and Vasudeva I. Reconstructing the sequence of these coins showed that the rulers after Vasudeva I were Kanishka, Vasishka, another Kanishka and another Vasudeva. Hence here we describe them as Kanishka II, Vasishka, Kanishka III and Vasudeva II. As well as the inscriptions from years 22 to 30 of Vasishka, there is a single inscription of Kanishka III of the year 41 (Skinner 2017; Rosenfield 1967; van Lohuizen-de Leeuw 1949).

Figure 2.28 Relief panel depicting a divine couple from Mathura in northern India, recording in a private Brahmi inscription the establishment of a village shrine in year 10, in the reign of Kanishka I (BM 1887,0717.53, sandstone, 399mm x 282mm; Skinner 32; Shrava no. 35). The first two lines record the date with the king's name and titles, *maharājasya devaputra kānīṣkasya* (great king, son of the gods, Kanishka). The forms of the Brahmi characters show that it was inscribed in the reign of Kanishka I and not in that of one of his successors (see §5.G.2)

The coincidence of the dates of Kanishka I and Kanishka II (**Fig. 2.28**) creates some uncertainty about the attribution of inscriptions to those kings, and where inscriptions mention no king at all, just a date, there is the added uncertainty that they might refer to yet another later reckoning. The inscriptions that can most certainly be attributed to different sequences, successive centuries as suggested first by van Lohuizen-de Leeuw (1949, 241–4; 1986, 1) and now by Falk (2015a, 129), are a pair which refer to a Jain nun Vasula on Mathura sculptures dated in the years 86 and 15 (Skinner 138 and 169). Both come from Kankali Tila and neither mention the king (in general Buddhists seem more likely to mention the ruler in the dating formula than Jains but there is no hard and fast rule). It seems unlikely Vasula could have been active from the years 15 to 86, 71 years apart, of any single reckoning, so it is more sensible to position the two sculptures in the year 86 of Kanishka I's reckoning (AD 212) and the year 15 of the following century (AD 241), i.e. 30 years apart. Attempts to extend from this attribution to a more general scheme for the Mathuran inscriptions have used the palaeography of the script (van Lohuizen-de Leeuw 1949), the style of the sculpture (Rosenfield 1967, 107–8), and most recently the language of the inscriptions themselves (Skinner 2017, 190–4).

It is now demonstrably the case that inscriptions from Kanishka I to Kanishka III are in more than one reckoning, and since these are approximately one hundred years apart there is very little practical difference between two eras and two centuries of the same era. However, it is not clear why the era reverted to year 1 in its second century. One possibility is that the founding of Kanishka I's new era coincided closely with the first year of the fourth century of the Greek era (see §A.2 for a discussion of the Azes and Greek eras) and was effectively a repurposing of that widely used reckoning (**Fig. 2.29**). This would correspond with his replacement of the Greek language with Bactrian, also described in the Rabatak inscription in the sentence before the description of his foundation of the new era (Cribb 2005a; 2015). And since the era's inception would be associated with omitting the century of the Greek era it seems plausible this practice may have stuck, or even possibly that Kanishka II imitated his namesake, in inaugurating a new century which began *c.* AD 227 (i.e. shortly before his accession).

In summary, the order in which the first nine Kushan kings ruled can be defined because of their coins, and as a result it is known with certainty that inscriptions referring to them represent four different sequences of dates: the Azes era, the Yona era, the era established by Kanishka I, and a 'Kushan era' sequence which commenced approximately one hundred years later. The relationship between these sequences is broadly understood, with only small margins of error, perhaps ± 10 years at most. As there are many independent pieces of evidence which date particular points in these different sequences, there is little doubt that Kanishka I's era began close to, if not exactly in, AD 127. As such 'the date of Kanishka' which was the central historiographic problem of Kushan studies in the 20th century is today a closed issue (Cribb 2018a).

An uncertain reference to a ruler called Kanishka, son of Huvishka, has also been found on a so-far unique copper coin found on the surface at Sonkh (Gupta 1973; 1988a, 132–3: Gupta and Kulashreshtha 1994, 147–8, 161–2; Göbl 1984, 103, type 984), but it is unclear who issued the coin and to whom it refers (see §E.2).

D.3 Kanishka I: royal images

The labelled portrait sculpture of Kanishka I from the Mat sanctuary near Mathura (Rosenfield 1967, pls 1–2; Skinner 9) provides a vivid impression of how the king was represented. It is very similar to the standing representations of his father on his copper coins. Both wear tunic and leggings under an overcoat, so are dressed in a costume common in Iranian art. Like his father, Kanishka is shown with a large club in his right hand and with his left hand holding the hilt of his sword, but unlike his father's coin images the sword is on top of his overcoat. On his coins Kanishka I is normally shown without the overcoat and club, holding a spear in his left hand and with a cloak over his shoulders, but in the same posture as his father and also making an offering at a small altar. From his second issue of gold coins Kanishka I has an elephant goad in his right hand, a symbol also carried by the

Figure 2.29 Pedestal for a Buddha image, depicting the Bodhisattva Maitreya flanked by the gods Indra and Brahma and a third unidentified figure, found in Gandhara near Hashtnagar, Palatu Dheri, Charasadda District (BM 1890.1116.1, schist, 380mm x 205mm; CKI 124). Its Kharoshthi inscription states that it was dedicated in the year 384 of what must be the Greek era. Though Kanishka's new era replaced older reckonings throughout the empire it seems the Greek era continued to be used in eastern Gandhara and perhaps Swat. If the Greek era year 301 was the first year of Kanishka I's reign then this pedestal is dated *c.* AD 210

god Oesho on his coins. As on his father's coins the imagery links him with this god. Kanishka I, like his father also represents himself with the divine attribute of flaming shoulders. On his first issue of gold quarter dinars and some rare copper issues (D.C1-misc-i) Kanishka I is shown rising from the mountain top as on his father's coins. On one late die the spear is replaced with a standard with a bird-like finial (D.G1-iii, obverse 1B).

The sculpture is without its head, but on the coins Kanishka I is shown, like his father, with a large beard and on most coins the same tall headdress, but with a circle in place of the curved line on its side. On late coins the tall hat has a laddered brim. On some early gold and copper coins the king wears a diadem ornamented with a crescent in place of the tall headdress. On these issues the different headdresses indicate the different work stations at the mint.

On two varieties of copper coins Kanishka I is shown holding the club associated with Oesho. One issue (D.C1-misc-ii) shows the king standing in the same posture as on his other coins and holding an elephant goad in his right hand, but also holding a club in his left hand and with a trident by the small altar. The other issue, the first phase of the Kashmir copper mint (D.C3-i), shows an image closely associated with Wima Takto as well as Wima Kadphises. It shows Kanishka I enthroned, holding a club in his raised right hand, in front of his face rather than over his shoulder. The drawing of his clothing suggests that he is wearing an overcoat and has his left hand covered. The throne is high-backed but has plain legs. Unlike his normal coin representation, the king is shown without a beard, but with long sideburns like those of Kujula Kadphises on some coins (A.S3-i, A.S4-i). A few late copper coins with the standard imagery also show the king beardless and with sideburns, particularly those with Buddhist reverses (D.C1-iii, D.C1-misc-iii, D.C2-i, -ii and -iii).

The beardless portrait is also repeated on the Shah-ji-ki-Dheri casket (**Fig. 2.30**) (Rosenfield 1967, fig. 60). The beardlessness of this image has prompted many to reject its identification as Kanishka I, and suggest it represented Kanishka II or III, or to compare it with the coins of Huvishka (Rosenfield 1967, 260–1). Elizabeth Errington has rediscovered the original report of its discovery and identified the coin found with it as a late imitation of Huvishka (2002), giving its deposit a *terminus post quem* of *c.* AD 170 (cf. E-imit.C3-vi). The figure of the king on the reliquary is dressed in the same costume as worn by Kanishka I on his coins, his left hand is covered as on the first issue Kashmir copper mint coins (D.C3-i) and his lack of beard and heavy sideburns also correspond with his image on the Kashmir coins, so it is difficult not to identify it as Kanishka I's portrait, and probably made during his reign. The mistaken attribution of the Kanishka I reliquary as relating to a later Kanishka has been used as evidence to suggest that the Kanishka in Buddhist legend should be Kanishka II (Foltz 2010, 45; see §D.5.1).

When his coins are not worn, one can sometimes see a small round mark on the king's cheek, suggestive of a wart or lesion. The same feature appears, normally on the forehead on many Parthian coin portraits from the mid-1st century BC until the mid-1st century AD (Sellwood 1980). This disfigurement perhaps relates to the royal status of the king and his having kingship bestowed by the gods (Rosenfield 1967, 62). Tanabe equates the mark as a symbol of Xvarnah, the Iranian royal glory (1993, 20–3, 69–75).

On some of Kanishka I's coins a novel feature began to appear which became more common later: the surrounding of the king's head by a halo. Its only previous occurrence was on a copper coin issue of Wima Takto from an unlocated mint, only known from two specimens (B.C6-i). This never appears at the gold mints, but at the main copper mint it can be seen on a few of the obverses used with the Buddha image coins (D.C1-iii). At the Gandhara copper mint it became the norm during the third phase (D.C2-iii), where only one die lacks it. At the Kashmir copper mint, it is present from the first issue at the Kashmir mint (D.C3-i) on all dies, but after that it is used intermittently.

There is another sculptural image identified as a representation of Kanishka I. It is one of the royal images found during the excavations at Surkh Kotal (Fussman 1983, 33–4, figs 11–13; Rosenfield 1967, figs 119–21). The three standing royal images found there all wear the same overcoat over tunic and leggings costume as the Kanishka I sculpture at Mat, but are all missing arms and head, so there are no other indications of identity. The closest of them (Fussman 1983, 33, fig. 11) in surviving details to the Mat sculpture has prompted that one to be identified as Kanishka I, but there is no other rationale.

D.4 Kanishka I: forms of name and titles

The name of Kanishka is very stable and is normally KANHÞKI or KANHÞKO in Bactrian on his coins and in the form KANHÞKE in the Rabatak inscription and KANHÞKI on the silver plate inscription (Sims-Williams 2004; 2015). The ending in -O indicates the nominative case, but -I, or -E are oblique inflections. Although a nominative case might be expected, as it was already used under Wima Kadphises, Kanishka I and Huvishka's coins often use the oblique inflection to indicate the possessive case. In the silver plate inscription KANHÞKI is used for both nominative and oblique cases in the inscriptions and likewise KANHÞKE in the Rabatak inscription, so it seems that the writing of inflections in Bactrian was not fixed. In Gandhari inscriptions his name is spelt *kaṇiṣka* (Skinner 42, 47), but in Epigraphical Hybrid Sanskrit inscriptions from Mathura there is uncertainty about the initial vowel length in the various recorded versions of his name: *kāṇiṣko* (on his portrait sculpture Skinner 9), *kāṇiṣka* (Skinner 32, 35, 39) or *kaṇiṣka* (Skinner 10, 12, 17, 19, 20, 26, 27, 38) and there is one abbreviation *kāṇi* (Skinner 43).

The meaning of Kanishka's name and the parallels in other languages of the suffix *-iṣka* (or HÞKO) have been discussed by Sims-Williams (2002, 237–40). The suffix also appears in two other Kushan royal names, Huvishka and Vasishka. Sims-Williams suggests that the suffix is derived from Old Iranian through 'an otherwise unattested Iranian language', i.e. that originally spoken by the Da Yuezhi, and compares Kanishka's name with the Khotanese word *kaṇaiska* meaning 'little finger' (*ibid*., 238–40). Both Huvishka and Vasishka appear to have *-iṣka* as a hypocoristic suffix (i.e. diminutive or familiar formation), making their names hypocoristic forms of Ooemo and Vasudeva respectively.

In the Bactrian inscription on his gold coins and on a few copper issues Kanishka adds the dynastic name Kushan to the end of his own name. In the Rabatak inscription the same addition is seen (Sims-Williams 2004, 57, line 18), but also with the Bactrian definite article *ι* between his personal and dynastic name (line 1), i.e. Kanishka the Kushan.

Kanishka I used the imperial titles in Greek ΒΑΣΙΛΕΥΣ ΒΑΣΙΛΕΩΝ, then Bactrian ÞAONANO ÞAO, both meaning king of kings, on his gold coins and on his first issue of copper at the main mint. Subsequently most of his copper coinage normally has the simple royal title ÞAO king. His portrait statue at Mathura bears the imperial title in Brahmi *mahārājā rājātirājā* and the *devaputro* title introduced by his grandfather (Shrava 4). In unofficial inscriptions where Kanishka is referred to in the dating formula one or more of these three titles are used, and in one case without any titles at all (Skinner 27; Konow 1929, 142–5). In the Rabatak inscription Kanishka I is referred to with titles similar to those of his grandfather Wima Takto: ΒΩΓΟ (saviour), ΣΤΟΡΓΟ (great), ΡΑÞΤΟΓΟ (righteous), ΛΑΔΕΙΓΟ (just), ΒΑΓΟ (divine) and ΗΖΝΟΓΟ (worthy of worship) (Panaino 2009), with one addition ΧΟΑΖΑΟΑΡΓΟ (self-powerful, i.e. autocratic) (Sims-Williams 2004, lines 1–2) and later in the inscription with the Bactrian version of *devaputra* ΒΑΓΟΠΟΥΡΟ (lines 14 and 19). Kanishka I is also referred to as ΛΡΟΥΠΟ (healthy), ΑΓΓΑΔΔΙΓΓΟ (fortunate) and ΟΑΝΙΝΔΟ (victorious), but it is not clear whether these are just adjectives or specific royal titles. In this inscription his ancestors were only referred to with the title of king (lines 12–13), whereas he is referred to with the full imperial title (lines 17–18). In the Surkh Kotal inscription, composed in the reign of Huvishka, Kanishka is also given the title ΟΑΝΙΝΔΟ (Maricq 1958b; Curiel 1954). The Bactrian title ΧΟΑΖΑΟΑΡΓΟ (self-powerful, i.e. autocratic) perhaps relates to the Gandhari title *svayabala* appearing in the Kharoshthi document recording Wima Kadphises' donations (Allon 2019; see §C.4 above) and in the Kamra inscription of Vasishka (Skinner 188; CKI 230; see §H.4 below).

D.5 Kanishka I: religious connections and imagery

D.5.1 Buddhism

Kanishka is most famous as a patron of Buddhism (Zürcher 1968, 374–87). According to Buddhist texts he came to Buddhism following bloody military campaigns, not coincidently, in the same way as Ashoka adopted Buddhism (*ibid*., 385). He is described as supporting the Buddhist monastic community, founding monasteries and stupas, collecting relics and convening in Kashmir a council of the Buddhist community to reaffirm its unity and to re-establish the authority of its scriptures (*ibid*., 379–82). Many scholars have envisaged a constellation of Buddhist writers at his court as representing Kushan sponsorship of the religion (Bivar 1983, 204; Ollett 2019, 272), and some have gone further suggesting the Kushan sponsorship played a pivotal role in the development of Gandharan Buddhist art (see discussion below).

However, the timing, extent and even reality of Kanishka I's attachment to Buddhism is not clear, as the Buddhist texts were written much later and mixed with mythic narratives of other patrons such as Ashoka (Bussagli 1968, 42). Connections with Buddhist writers, or artistic patronage,

are often tenuous and reflect a-priori assumptions in the scholarship that favour associations with Kanishka I over the two later kings of the same name (see discussion below).

Other than the coins (discussed below) the best contemporary evidence for Buddhist patronage comes from inscriptions. There are many Buddhist donative inscriptions dated in the reign of Kanishka, in Brahmi, from the city of Mathura, and elsewhere in in northern India, and a modest number in Kharoshthi further north. Unfortunately, while Buddhist sites with inscriptions do survive in Bactria, such as Kara Tepe (Sims-Williams 2013), there does not seem to have been an equivalent fashion for inscribing dated dedications employing the king's name (for an overview of Bactrian epigraphy see Ball *et al.* 2019, 436–9), so it is harder to connect such evidence with Kanishka's reign. The existence of such inscriptions indicates that Buddhism flourished in the Kushan empire, into Afghanistan and further north, perhaps assisted by Kushan imperial authority establishing stability across the region so that monks and lay members of the Buddhist community could move without risk. This imagined stability has been referred to as *pax Kushanica* (Toynbee 1976, 276; Tucci 1977, 49–50). While these are frequently referred to in scholarship as 'Kushan inscriptions' they are in fact overwhelmingly private donations whose donors had no connection with the Kushan state beyond living within its territory and thus using the names of the kings in public dating formulae.

Only a handful of inscriptions show a connection to the state but no surviving inscriptions show a high court official acting directly on behalf of Kanishka I – as is the case in the reign of Huvishka, his successor, when a temple at Mathura was constructed for the use of Brahmins (Shrava 64; Skinner 50; Falk 2015a, 121–2). The most significant of these inscriptions, and the only direct contemporary evidence of the relationship between Kanishka I and Buddhism can be found in the dedication of a monastery in his name, mentioned in the inscription on the Buddhist reliquary, known as the Shah-ji-ki-Dheri, or Kanishka, casket (see **Fig. 2.30**) (Kreitman 1992, 193–7; Errington 2002; Baums 2012, 246, no. 45; Skinner 47; CKI 145). As discussed above, the imagery on it shows the figure of Kanishka I in a Buddhist context, flanked by sun and moon gods, alongside seated Buddhas and surmounted (on the lid) by the Buddha flanked by Indra and Brahma. The casket was recovered from the site of a stupa near Peshawar. The stupa is probably the one at Peshawar attributed to Kanishka by the Buddhist pilgrims from China: Faxian, Song Yun and Xuanzang (Zürcher 1968, 374–9). However, the inscription is a private donation, probably re-using a casket previously gifted to the monastery, by two Buddhist officials, not earlier than the reign of Huvishka (Errington 2002). The only evidence it supplies is that the monastery was named after Kanishka I. The imagery of the king and his divine attendants and its deposit in the reign of Huvishka are the strongest evidence for it being made during the reign of Kanishka I or shortly afterwards. The sun and moon gods are identifiable by their iconography with the images of these gods featured on the coins of Kanishka I and Huvishka, so it seems most likely that the king represents one of these kings, and that Kanishka I is more probable given the context suggested by

Figure 2.30 Electrotype copy of the bronze Kanishka casket, found at the Shah-ji-ki-Dheri stupa in Peshawar, which was made when the original was cleaned and preserved at the British Museum (BM 1880.270, 192mm x 105mm).
The Kharoshthi script Gandhari inscription on the casket mentions the city and monastery both named after Kanishka. The casket depicts Kanishka I (*c.* AD 127–150) and the Iranian pantheon of the bagolaggos, represented by Mao and Miiro on its side, below the Buddha, flanked by the Indian gods Brahma and Indra, on its lid

the mention of the monastery and town named after him. It has been argued (Majumdar 1937, 13; Rosenfield 1967, 260) that the king's lack of beard means it should be attributed to a different Kanishka, but that view contradicts the evidence of his first issue of coins at his Kashmir mint, where he is shown without a beard (D.C3-i 1/4u; see §D.3).

While there is little evidence for direct royal patronage there is epigraphic evidence that the wider court patronised Buddhism. The distinction between king and 'court' is a fuzzy one because the administrative structures of the Kushan empire are not fully understood and the meaning of different titles is often unclear but it is possible that the Kushans superimposed their own administration, perhaps represented by the karalrangs mentioned in Bactrian inscriptions associated with the official Nokonzok (Gershevitch 1979; Sims-Williams and Cribb 1995–6; Sims-Williams 1998; 2004; 2015), over local ones, and the actions of those local ones should not necessarily be taken as reflections of official policy (though the converse applies, we cannot rule out that local administrations were responding to some royal direction).

Some half a dozen names are known from inscriptions associated with Buddhist donations, with the most common titles being variations on satrap and *daḍanāyaka* (CKI 149,

CKI 440, CKI 178, CKI 179, CKI 244; Lüders 1961, no. 99; Sircar 1961–2, 10; Shrava 9 and 10; Vogel 1905–6; Salomon 1998, 270–2). The former began as an Achaemenid title for a provincial governor and came to be used as the title of independent rulers under the Indo-Scythians and Western Satraps, while the latter appears to be of Indian origin (*dandanyaka*) and is usually translated as 'general'. As these are all dated in a Kushan dating sequence or in the Greek era after 300 (see **Fig. 2.29**) they are broadly assumed to represent the wider 'court', that is, subordinates of the Kushans with either territorial or military responsibility. Of course, they probably also represent continuations of the royal houses which had previously ruled independently in the Indo-Scythian and Indo-Parthian period, so it is hard to tell if this wider court patronage of Buddhism is a response to a royal lead or a continuation of the widespread support of Buddhism before the Kushans.

In contrast to inscriptions Buddhist texts do attribute Kanishka a direct role in the patronage of Buddhism, portraying him as a convert, and associating him with various Buddhist monks, or rather associating the monks with a king named Kanishka. Most prominent in modern discussions are the Chinese monk Xuanzang's accounts which attribute to a king Kanishka the construction of monasteries (Li Rongxi 1996, 36–7, 63, 102), a monumental stupa at Peshawar (Li Rongxi 1995, 57–8; 1996, 59–60) and the holding of a council (Li Rongxi 1995, 63–4; 1996, 69–70, 88–90). Xuanzang associates the council with two monks, Pārśva and Vasumitra, and though he knows of and reveres the famous Buddhist writer Aśvaghoṣa (Li Rongxi 1995, 200) he does not connect him with the Kushans. The connection with Kanishka is established only through a legendary account of the king in the *Tsa pao-tsang ching* which lists Aśvaghoṣa amongst his advisors (Zürcher 1968, 384–5). To make the connection with both Kanishka and the council it is necessary to draw on two further texts: the lives of Aśvaghoṣa and Vasubandhu, the latter of which has the council called by Kātyāynīputra in Kashmir, who subsequently invites Aśvaghoṣa (after the council is complete) from the city of Saketa (Ayodhya) (Li Rongxi 2002, 41–3). *The Life of Aśvaghoṣa* which is probably the earlier text (and was translated into Chinese around the turn of the 5th century) tells a different story. Aśvaghoṣa is converted to Buddhism by Pārśva in the city of Śākya (Li Rongxi 2002, 9). Though the text has nothing to say about a council it does mention a Kushan king subsequently:

> Later on, the king of Minor Yuezhi [*xiao yuezhi* 小月氏] in Northern India attacked Central India and besieged it for a long time. The king of Central India dispatched a letter that read, 'If you want anything from me, I will give it to you. Why should you surround and aggravate my people by staying here for such a long time?' (Li Rongxi 2002, 12; Young 2002).

It is tempting to associate this with Kanishka's campaigns in northern India (§D.1) but the text does not say that. This could in fact be any Kushan king, or potentially since the term 'minor Yuezhi' is reminiscent of 'little Yuezhi' which is used by Chinese authors to refer to people in the Tarim Basin they perceive to be ethnically connected to the Kushans or to the Kidarites, there is a small possibility it refers to a ruler who is not part of the Kushan dynasty.

A significant point in this discussion is that these references to Kanishka in the Buddhist texts all derive from the Taisho edition (BDK Tripitaka: Li Rongxi 1995, 1996 and 2002), and are not found in the Pali canon. The first collection represents Chinese transmission from the 4th century AD onwards, the second a Sri Lankan compilation of the 5th century AD. The Pali canon is late enough, and it incorporates material likely current in the Kushan period, such as the *Milindapanho* (a dialogue with the Indo-Greek king Menander: Rhys Davids 1890), that if references to Kanishka were simply accidental historical data, which is often how they are treated, we would expect them in both traditions. This suggests the use of Kanishka's name, or an association with the Yuezhi, was deliberate though the motivations are unclear. That more than one king shared the name has been known since the late 19th century (Cunningham 1893a, 118; Whitehead 1914, 173–4) but the long debates over chronology have obscured rather than clarified and accounts in textual studies are often very confused (cf. Anacker 1975, 47; Willemen 2012, 219).

It is therefore important to reiterate here what is known from numismatic and epigraphic records. There were three Kushan kings named Kanishka. The first came to the throne in the first half of the 2nd century and ruled for at least 23 years, the second came to the throne at least 98 years after the first, and the third ruled just a few decades later. In this publication we date them respectively AD 127–51, 230–46, and 267–72. Those dates are open to question; any of them might be adjusted perhaps by 5 or 10 years, but the basic relationship between these kings is not contestable – it is as close to a proven fact as it is possible for anything to be in Kushan studies, and it has been firmly established amongst specialists for decades. What is equally incontrovertible is that though Kanishka I has dominated modern scholarship, no evidence survives to suggest contemporaries thought of him in any higher regard than his successor Kanishka II (for Kanishka III see §I.2). It therefore follows that references to Kanishka in Buddhist sources, even including those to the third Buddhist council, could be attributed to Kanishka II and the 3rd century, as easily as to Kanishka I and the 2nd century, and on a piecemeal basis this has been suggested in the past (Harmatta 1994a, 323–4). The preference for Kanishka I rests on his supposed patronage of Buddhism as testified by the Shah-ji-ki-Dheri reliquary, a connection with his campaigns in the Gangetic valley, and the issue in his reign of coins depicting the Buddha. Yet, as already discussed, none of these pieces of evidence stands up to close scrutiny. For these reasons later Buddhist hagiographies connecting particular monks with Kanishka need to be treated with some scepticism, and references to Kanishka in texts provide only a *terminus post quem* of *c.* AD 127.

Aśvaghoṣa is probably the most famous of these Buddhist authors associated with Kanishka I's court, and though textual scholars express various degrees of scepticism as to his relationship with Kanishka I it is notable that all depend on the association with him for dating usually to '*c.* 100 AD' or '1st century AD' (for examples see Buswell 2004, 34; Cho 2002, 433; Tzohoar 2019, 189, fn. 5; and Eltschinger and Yamabe 2019 for a bibliography of this Buddhist thinker).

This is much too early in the context of Kushan chronology as Kanishka I's reign would provide an absolute *terminus post quem* of *c.* AD 127 for any text mentioning or associated with him, and would imply a later date still if a connection were drawn between the writer, the Buddhist council, and the Buddha coins issued late in Kanishka I's reign (see below). Likely it reflects the dating of Aśvaghoṣa becoming fixed before 1968 when AD 78 was still the most common theory for the date of Kanishka (for a dating to AD 126–50 on same basis see Ollett 2019, 270, fn. 1). As alluded to briefly already, the limited biographical evidence for Aśvaghoṣa would suggest a courtly context under the Mitra kings of Ayodhya (see above, **Fig. 2.26** and the Mitras §D.6.1), not a Kushan context. Likewise the Buddhist teacher Mātṛceṭa who authored a letter addressed to a king Kanishka has often been assumed to be a contemporary of Aśvaghoṣa on that basis. However, as will be argued later (§I.1) while the text shows every sign of being produced in a Kushan political context, possibly even under some form of patronage, the semi-legendary biographical accounts would make it the court of Kanishka III, not Kanishka I. Under careful scrutiny most of these associations begin to break down, and the idea of a literary circle specifically around Kanishka I is a rather problematic creation of modern historiography, rather than a natural inference from the evidence. This is too large a discussion to pursue here, but the dynastic political history offered here, suggests a critical reappraisal of the context of Buddhist writers in the early centuries AD is warranted, one that will afford the Kushans a more nuanced role, as one of a number of important courtly centres rather than an exclusive focus on the reign of Kanishka I.

Some authors have gone further than suggesting simple patronage and have ascribed Kanishka I, his court, or the Kushans in general, a pivotal role in the development of Buddhist art (Cribb 1985a, 80; Bivar 1991). Traditionally, Buddhist art has been divided into the somewhat inaccurately named aniconic and iconic periods, the division being that in the latter the Buddha himself is depicted in human form. That this was a profound shift is widely agreed and a variety of reasons for it have been offered (DeCaroli 2015). Regardless of its reason all discussion needs to begin from the simple observation that the earliest such images which can be firmly dated were all made in the reign of Kanishka I. His coins, discussed below and dating to the last years of his reign (*c.* AD 150), feature images based on Gandhara prototypes of both the historical Buddha and Maitreya, but these are not the earliest. A standing Gandharan image from the site of Loriyan Tangai is dated by its inscription to the year 318 (Skinner Yavana era 6; CKI 111). The only plausible reckoning for this is the Greek era, for which a number of fourth-century dates are known in the eastern Peshawar plain, and if year 301 of the Greek era coincides with year 1 of Kanishka's era (see §A.2) this would be the latter half of that king's reign (*c.* AD 144), a few years before the coins. Even if the Greek era was shifted earlier, as proposed by some scholars on the basis of the equation of the Azes era with the Vikrama (see §A.2) that would place the Loriyan Tangai image in the early years of Kanishka (*c.* AD 134), though it would still not be the earliest image. Buddha images from Mathura, known as the kapardin type, derive from a different prototype to those from Gandhara and were probably created independently (Coomaraswamy 1927; van Lohuizen-de Leeuw 1949; Krishan and Tadikonda 2012, 37–71). The earliest datable kapardin-type Buddhas are those erected in the middle Gangetic valley by the monastics Bala and Buddhamitra. Bala's monumental standing Buddha (the inscription calls it a Bodhisattva, see Rhi 1994) from Kosam is dated to the year 2 (or 3), early in Kanishka's reign (see §D.6.2 below).

Obviously while these are the earliest images that can be firmly dated they are not necessarily the first such images that were made. Opinions on by how much the earliest images predate these images from early in the reign of Kanishka I vary enormously from a few decades to several centuries. A number of attempts to identify earlier images have been demonstrated to be fanciful both on coins (Coomaraswamy 1927, 292, figs 6–9, 302; Cribb 1985a, 83) and on the Tillya Tepe medallion (Brown 2000; see Ch. 3 §C.3). Others have been based primarily on the anomalous nature of particular images (Rhi 1994; Krishan and Tadikonda 2012, 71; DeCaroli 2015, 29–50; Fogelin 2015, 155–8 and 169–73; Huntington 1992; Dehejia 1991; Linrothe 1993). The most compelling evidence for an earlier Buddha image than those of Kanishka I's reign is provided by the Bimaran reliquary (**Fig. 2.31**), though even this has been frequently misunderstood (Cribb 2016a). As shown by Cribb (2018c), though the reliquary may well predate the reign of Kanishka it is unlikely that it is much earlier than the early 2nd century AD. The existence of earlier sculptures in the north-west is best demonstrated by the set of relief images of the Buddha from Swat (van Lohuizen-de Leeuw 1979) showing a distinctly Indian style closer to the sculpture of northern India, such as at the Sanchi stupa, rather than to the Gandharan style exhibited in the Buddha images on Kanishka I's coins.

Concrete evidence of a connection with Buddhism does come from Kanishka's coins, where late in his reign he issued gold and copper coins with Buddhist images (Cribb 1999–2000), of the historical Buddha Sakyamuni (D.G1-iii 1d, reverses 8a and 8b and 1/4d reverse 8b; D.C1-iii, 1u reverses 14a–14n, 1/2u reverse 14o–14p, 1/4u 14q–14r) and the future Buddha, the Bodhisattva Maitreya (D.C1-iii, reverse 15a–g). The circumstances of the production of these coins suggests that they were all made at the same time and in a rush. Several die engravers were involved in cutting dies for the copper coins and there was an interruption of the flow of normal work practice at the gold mint, where two obverse dies were used with the reverse dies at the same time, so the whole of the mint's activities were given over to producing coins depicting the Buddha. They do not seem to have been made for inclusion in stupas, as the only example found in such a context (Ahin Posh stupa) had already been well worn (Simpson 1879). It is possible that they were made to coincide with the Buddhist council discussed above (Bussagli 1968, 42). The production of the coins appears to have taken place close to the end of Kanishka I's reign, which corresponds with legendary accounts of his reported desire to engage in good works to expunge his sins at the end of his life (Zürcher 1968, 384–7), though again, as with the council, it is possible that the coins inspired the stories.

Figure 2.31 Gold reliquary, found in the Bimaran 2 stupa, near Jalalabad, with depictions of two sets of images of the Buddha, and the Indian gods Indra and Brahma with a third unidentified figure (BM 1900,0209.1, gold set with garnets and turquoise, 65mm x 66mm).
It was already damaged when it was interred with coins of the late 1st/early 2nd century AD satrap Mujatria, suggesting that its depictions of the Buddha pre-date the reign of Kanishka I (*c.* AD 127–150). It was deposited within a stone reliquary recording a Buddhist donation in the centre of the stupa

In any case it is clear that the coins represent an unusual intrusion of subject into the normal production of coinage, one that must have responded to some event or complemented some act of state, and that commemorating a council or acts of largesse are very plausible explanations. However, while the subject of the coins is novel, it is very clear from the numismatic evidence that the treatment is not. The Buddha and Maitreya were incorporated into the numismatic pantheon and iconographically in the same manner as any other figure, as divine supporters for the king, and just one more divinity amongst many (Cribb 1999–2000).

The coins might appear to lend credence to the interpretation of literary sources discussed above, but they should be handled with caution. Firstly, the diversity of gods on coins is a feature only of the reigns of Kanishka I and Huvishka. The mints of Kanishka II and Kanishka III employ only Oesho and Ardochsho, and so the absence of the Buddha does not necessarily imply an inferior commitment to Buddhist patronage. Secondly, the coins might have inspired the texts, just as Potter (1996) has suggested that mentions of a Kanishka in a commentary could have inspired the story of a council.

D.5.2 Kushan religion

The gods appearing on Kanishka's coins have been the topic of much discussion, and many misunderstandings (Ch. 3 §D.4). Rowland (1953, 80) saw the images as a form of propaganda, a common misconception in line with contemporary thinking about coin design (Cribb 2009, 500–3). Chattopadhyay thought the gods were designed to 'reflect the religious beliefs of the Kushana monarchs, but also those of the people they subdued' and that their presence on the coins stimulated the 'intermingling of religious faiths' amongst their trade contacts (1967, 143–4; Rosenfield 1967, 69–70; see also Mann 2014). The view that the gods on Kanishka I's coins represented a variety of religions prevailed and has been used to mistakenly suggest an attitude on the part of the king of religious tolerance and an eclectic taste in religion (Mukherjee 1969, 49). Further studies of Kushan religion, however, have led to an increasing appreciation of its fundamentally Iranian nature (Zeymal 1997a, 245–7 and 262, n. 3; Gnoli 2009; Cribb 2008; Bracey 2012b; Grenet 2015), flowing in part from the discovery of Kushan official religious inscriptions at Surkh Kotal and Rabatak, and in part from the study of Kanishka's early gold coins. Grenet has characterised the Iranian nature of Kushan religion as Zoroastrianism, following the lead of Stein (1887) who used the same terminology for Kushan coins and Prinsep (1836) who called them Mithraic.

In the Rabatak inscription (Sims-Williams 2004, line 2) Kanishka I's kingship is said to have been bestowed by the goddess Nana (NANA). Further into the inscription (lines 9–11) there is a list of gods whose images are to be erected at the sanctuary (ΒΑΓΟΛΑΓΓΟ, abode of the gods) 'in the presence of glorious Umma [OMMO]' (line 9). The list of gods (lines 9–10) to be depicted is 'the above-mentioned Nana and the above-mentioned Umma, Aurmuzd [ΑΟΡΟΜΟΖΔΟ], Muzhduwan [ΜΟΖΔΟΟΑΝΟ], Sroshard [ΣΡΟΦΑΡΔΟ] – [interlinear] who in Indian is called Mahāsena [ΜΑΑΣΗΝΟ] and is called Viśākha [ΒΙΖΑΓΟ] – Narasa [ΝΑΡΑΣΑΟ], and Mihir [ΜΙΙΡΟ]' (Sims-Williams 2004, 56). As translated there appear to be two distinct gods, Nana and Umma, placed in the leading role at the sanctuary (lines 2 and 9), so it seems plausible that a single goddess is being referred to with two different names and, instead of translating the word αμγα as 'above-mentioned', it could be translated as 'same' (as a form of it υαμγο is used in the Bactrian documents, Sims-Williams 2007, 271–2), as has been suggested by Gnoli (2009, 144). On coins of Huvishka both Nana and a goddess labelled OMMO are paired with the Kushan god Oesho (Nana E.G1-ii 1/4u, reverse 4c; OMMO E.G2-ii, reverse 5d). The image of Nana carries her usual lion-protome wand, but Ommo carries a flower. It appears that the Bactrian OMMO represents the name of the Indian deity Uma, consort of Oesho's Indian parallel Śiva and that she was equated with NANA as part of the Kushan pantheon. The practice of double naming Kushan gods with their Indian equivalent is shown in the interlinear inscription (between lines 9 and 10). The interlinear should

apply to both Sroshard and Narasao, as on the gold coins of Huvishka Mahasena and Vishakha are represented as two separate gods (E.G1-ii, reverse 9a), even though the grammar appears to suggest both Indian names apply only to one of them (Sims-Williams 2004, 64). In their Zoroastrian setting Sroshard and Narasao are protective deities (Gnoli 2009, 143), matching their Indian counterparts, who are both depicted as warrior deities.

The newly discovered silver plate (Sims-Williams 2015, 257) records that Kanishka I presented it to a shrine ('court', perhaps a synonym for *bagolaggo*) of Oesho on his return from victory in India. These two inscriptions suggest that the Rabatak shrine, devoted to the goddess Nana/Uma, may have been only part of the royal cult and that elsewhere, perhaps at Surkh Kotal, dedicated to Kanishka the victorious, there was another royal shrine which acknowledged Oesho/Śiva's part in bestowing kingship on Kanishka I. On his second phase coins from his main gold mint Kanishka I is shown holding an elephant goad, which is also held by Oesho when he appears on the reverse of these coins (D.G1-ii, reverses 6b and 6c), showing the king's association with this god.

The recutting of dies from Greek to Bactrian inscriptions in Kanishka I's first phase of coinage at his main gold mint shows what appear from their names to be Greek gods being relabelled as Iranian gods. The gods with Greek names on Kanishka's coins (D.G1-i), however, represent Iranian gods with their names translated into Greek (Zeymal 1997a, 262, n. 3; Grenet 1984; Cribb 1998b; 2008; Bracey 2012b; Grenet 2015; Adrych *et al.* 2017, 117–19) and the Indian gods such as Mahasena on Huvishka's coins (E.G1-i, E.G2-i) are manifestations of Kushan gods, as is shown by the Rabatak inscription, being given Indian names because of the characteristics they share with the named god. A different understanding of the relationship between the Indian gods and the Kushan gods linked in the Rabatak inscription is presented by Mann (2014, 236–7), who saw the Indian deity Skanda and his associated deities Mahasena and Vishakha as the focus of Huvishka's coin depictions rather than the Kushan deities they represented (*ibid.*, 241 and 246). The only religious images which can be differentiated from this practice of showing Iranian gods are the Buddhist ones, but they are positioned on the coins in the same way as the Iranian ones, as objects of Kanishka I's worship (see also the discussion of Vishnu/Krishna on Huvishka and Vasudeva I's coins below §F.5).

The same process can be understood for all the gods who appear in the Kushan numismatic pantheon with Greek or Indian names. In this way the religious practice observable at the various Kushan dynastic shrines at Khalchayan, Rabatak, Surkh Kotal, Dasht-e Nawar(?), Ayrtam(?), Dilberjin(?), Kamra(?) and Mathura (Bracey 2012b, 205–9) can be understood as the cult of a wide range of Iranian gods by the Kushan kings and their court and it is this cult that is reflected on Kanishka I's coins. The representation of Kanishka I as performing an act of worship appears to be intended to articulate his relationship with the gods on the back of his coins, as though the obverse and reverse designs are intended to be seen together as an image of worshipper and worshipped. On some Kushano-Sasanian coins the same scene is represented, but with both king and god on the same side of the coin (R.C1-i, T.S1-i, U.S1-i, V.G1-i). The gestures made by the gods on the reverse of Kanishka's coins also show their reciprocal action, accepting the king's offering and bestowing blessings and kingship on him. Most gods make a gesture of blessing: Nana gestures with her wand and Mozdooano with his trident; Miiro and Mao gesture with raised hand; Athsho, Lrooaspo and Manaobago offer the diadem of kingship and Oesho pours water to also offer kingship (Pal 1988); the Buddha makes his gesture of reassurance (*abhayamudra*) but Orlagno and Pharro only stand in attention. The Rabatak inscription makes the relationship between king as supplicant and the gods as bestowers of kingship explicit.

The role of the king as articulated in the Shah-ji-ki-Dheri casket in some ways sums up Kanishka I's relationship with both Buddhism and with the Kushan pantheon as represented on the casket by Miiro (Sun) and Mao (Moon). As depicted on the casket the king stands within a spiritual cosmos. He has his feet on the ground and his head is on a level with the Sun and Moon together with a series of three meditating Buddhas all borne aloft on a garland by putti. Two of the Buddhas have companions also in the level above the garland. One of the Buddhas seems to represent the historical Buddha, as he is accompanied by the figures of the Indian deities Indra and Brahma, showing the scene in the Trayastrimsa heaven where they entreat the Buddha to fulfil his mission. Another seems to represent Dipankara, an earlier Buddha, being venerated by Sumedha, a former incarnation of the historical Buddha, who throws a flower towards Dipankara. The third meditating Buddha is alone and has no identifying features. The king offers flowers in his right hand and has his left hand covered, an Iranian gesture of worship. Above the king's head and above the Buddhas and their companions fly a skein of geese all holding garlands. The whole scene represents the king reaching from earth to the heavens as a mediator on behalf of his subjects to the gods and Buddhas in the heavens, all beneath the sky (through which the geese fly). At the *bagolaggo/devakula* and on the coins the king draws his authority from his role as the representative of his subjects in the heavenly realm and of the gods on earth, through the relationship he establishes with the gods through his offerings.

A small four-faced seal in the British Museum (**Fig. 2.32**), collected by Charles Masson at Begram can also be used to articulate the relationship between the Kushan king and the gods depicted on his coins. One facet of the seal shows a Kushan king making an offering at a small altar. The other three facets of the seal show images of gods. One is the three-headed version of Oesho, with a central clean-shaven face flanked by an animal head and a bearded human head, the same combination as appears on Wima Kadphises' copper coins (C.C1) and Vasudeva I's gold coinage (F.G2-iii). Oesho holds the trident (with battle axe on side) in his raised right hand and appears to hold a club or uncertain object in his lowered left hand. A long scarf seems to drop from his shoulders. The second facet shows a loving couple embracing each other; both are clothed and have long scarfs hanging behind them. The third facet shows an image of Heracles holding a club in his lowered right hand and with a

Figure 2.32 Four-faced cuboid seal, found near Kabul, depicting a Kushan king making an offering at an altar and three different manifestations of the Kushan god Oesho (BM 1880.4073, bronze, 18mm x 11mm x 11mm).
The other images represent Oesho as the Kushan god with added bull and bearded human heads to right and left of his own, holding trident and club, as the Greek god Heracles and as the Indian god Śiva, paired with his consort Uma

lion skin hanging from his left forearm, with a dotted arc before his face. The seal seems to show the king making an offering to three different manifestations of the Kushan god Oesho: in his usual guise as featured on Kushan coins, as Greek Heracles and as Indian Śiva with his consort Uma Parvati (Cribb 1997a, 39). The identity of the king is not clear and could be associated with any Kushan ruler, but the king is bearded and shown in tunic and leggings, with a long cloak hanging down behind him, wearing the Iranian-style headdress worn by Kanishka I on this early coinage (D.G1-i), so could be identified as him. The dual representation of Oesho and Heracles also recalls the recut die in Kanishka's early gold coinage where the inscription naming Heracles on a first phase die was replaced by Oesho (D.G1-i, reverse 6b). Once again, this seal emphasises the key role of Oesho in the Kushan pantheon.

D.5.3 Gods on coins

The religious meaning of the gods on Kanishka's coins as Iranian gods whom the king worships and who bestow kingship and blessings on him is clear, but it does not explain why the particular gods who are on the coins were chosen and why other gods were not featured (see Ch. 3 §E.3). If the Kushan religion is a form of Zoroastrianism, then one would expect Ahuramazda to play a dominant role, but he only appears on coins once on a unique die from the middle of Huvishka's reign (E.G1-v, reverse 20a). The gods who appear most frequently on Kanishka I's coins are Nana, Miiro, Mao, Athsho, Oesho and Oado, but they do not appear on all series. Oado appears with the Greek name Anemos on Kanishka I's first issue of gold coins from the main mint, but then disappears from the gold, only featuring on copper coins. The gods Ardochsho and Pharro (**Fig. 2.33**) only appear at the end of the third phase of the gold coinage and on very rare copper coins of the Gandhara mint. There are also the gods Lrooaspo, Manaobago, Mozdooano and Orlagno who only feature in the third phase at the main gold mint and Manaobago who also appears on rare copper coins of the Gandhara copper mint. Die studies of the gold dinars and quarter dinars at the beginning of the production of the main gold mint give some indication of the function of the gods on the coins. There are two obverse dies in use for the dinar, distinguished by the king wearing different headdresses: a tall Iranian headdress or a crescent. From the first phase of copper coinage at the main copper mint, these crowns seem to be associated with Miiro and Nana, the only gods on their reverses. The first reverse dies used at the gold mint also depict these two deities. There are two workmen (with assistants) striking dinars and the different designs distinguish their products, so the use of two gods has a clearly functional purpose in terms of running the mint and controlling production. After a while these two workmen begin to use two different reverses featuring two other gods and then again two more. The reverses seem to be used to indicate batches of production, and this impression is reinforced when there are two reverse dies with the same Nana design used in succession, as though the die broke before the batch had finished, so a new die was needed to complete the batch. This is also confirmed by the quarter dinars, which were made by a single workman (with assistants). The sequence of gods again began with Miiro and then Nana (from two dies). There is also evidence of repairs (recutting) to the dies, probably to keep them in operation during the production of a batch (see Ch. 3, **Tables 3.3, 3.4** and **3.7**).

The representation of the king making an offering to a god who bestows blessings and kingship is a statement of this king's right to rule, and therefore his authority to issue coins and to control their production and use (Cribb 2009, 514), so has a functional role in terms of the coinage. The utilisation of reverses depicting multiple deities also had a functional role in the control of production, but the decision as to which gods to use must have had a higher purpose. The administration of the mint at court level probably made such decisions, choosing which gods were considered to be important for expressing the king's authority. The continuing appearance of Nana and Oesho matches their status in the Rabatak and silver plate inscriptions; that of Miiro and Mao matches their relationship with Kanishka I as shown on the Shah-ji-ki-Dheri Kanishka casket. As yet there is no clear indication as to why Athsho and Oado were chosen to accompany the other four as the main coin designs.

It is curious that the pantheon described in the Rabatak inscription and that on the coins do not match. The range of gods on the coins was enlarged or constricted for reasons that remain unclear, and it is possible that the choice of gods in the Rabatak inscription may represent a different underlying rationale. The suggestion above that the Rabatak sanctuary was designed to honour Nana's role in bestowing kingship and that there was probably another honouring Oesho's similar role offers a solution. Perhaps the gods led by Nana/Uma at the Rabatak sanctuary are the ones specifically associated with her and a similar list of different associated deities would have been led by Oesho at the sanctuary honouring his role in relation to the king.

The choice of gods to go on the coins also seems to shift over time, as the appearance of Ardochsho and Pharro towards the end of Kanishka I's reign seems to set a fashion which continues into the next reign, and by the end of Huvishka's reign Ardochsho seems to have risen in popularity as a choice at the mint. Through die studies showing the progression of die usage at the mints, patterns of behaviour begin to emerge (Ch. 3, **Tables 3.3, 3.4** and **3.7**), and further such studies may reveal more patterns informing us of changing approaches to the gods depicted.

D.5.4 Other religions

Inscriptions at Mathura show that, although the most numerous dedicatory inscriptions are Buddhist, other religions, Jainism, Brahmanism, various cults associated with Hinduism, and Naga cults, flourished in the time of Kanishka I (Skinner 2017, 86–8), but there is no evidence of royal engagement with Jainism and the Naga cult in Kanishka I's coins or official inscriptions, and Brahmanism is only involved to the degree that it can be, dubiously, equated with Shaivite imagery which provides iconographic and conceptual parallels for the Iranian gods of the Kushan pantheon.

The Kushans are often described as exhibiting 'religious tolerance' (Benjamin 2018, 202) or a 'tolerant attitude toward diverse religions' (Foltz 2010, 45), but on the basis of the available evidence this is mistaken. Their pantheon, which represented the gods who bestowed kingship on them in the Iranian religious tradition, absorbed aspects of iconography from other religions, and led them to equate gods from their pantheon with other gods worshipped in their realm, but there is very little evidence of their personal faith or that they actively patronised religious institutions other than the *bagolaggo*s. It is clear that some royal patronage was directed to Buddhist institutions (see §C.5, §D.5.1, §E.5 and §F.5), and one inscription indicates the financial support of Brahmins (§E.5), but none of these refer to any kind of personal conviction. This does not reflect tolerance, but a view of the benefits to them of aspects of Buddhism, in the same way that some ancient Indian kings could support Buddhism at the same time as seeking the blessings of Brahmanic gods. 'Religious tolerance' in its modern sense is far from the context of ancient India and Central Asia, and it seems inappropriate to speak of it in any ancient society. There is also no justification for suggesting that the Kushans were indifferent to religion because of their drawing of iconography from other religions, as has been proposed by Rezakhani (2017, 61): 'the variety of religious references and the mixture of their symbolism seems to suggest their lack of adherence to, or support of, any particular religion'.

D.6 Kanishka I: contemporaries and international contacts

The only records of contact with China during Kanishka I's reign come from later Buddhist writers, but the presence of his coins at Khotan as discussed above suggests that at least trade relations into Chinese-controlled territory continued. Chinese pilgrims Song Yun, writing in the 6th century, and Xuanzang, writing in the 7th century, both described Kanishka I taking an army into the territory now called

Figure 2.33 High relief sculpture depicting the enthroned figures of a goddess holding a cornucopia and a god holding cup, from Gandhara, Takhti-i-Bahi in Yusufzai District (BM 1950,0726.2, 270mm x 247mm x 103 mm).
The cornucopia was the common attribute of Tyche, the Greek goddess of good fortune and her Roman counterpart Fortuna, and became the standard iconography for the Kushan goddess Ardochsho on Kushan coins. Her male counterpart is similar to the Kushan god of good fortune Pharro appearing on coins of Kanishka I and Huvishka. The figure above holding a purse and the coins poured from pots below their feet confirm their identity as gods of good fortune. Here these gods appear in a Buddhist context so it is likely they represent the Buddhist deities Pañcika and Hārītī associated with prosperity. This goddess' enthroned image, identified as Ardochsho on Kushan coins of Kanishka II, was re-used on the coinage of subsequent dynasties until the 11th century AD, but modified by the replacement of the cornucopia with a lotus so that it represented the Hindu goddess Śrī

Xinjiang and holding hostages from kingdoms in that region (Zürcher 1968, 377, 382; Falk 2015a, 115) and a 5th-century Chinese Buddhist source records his attacks on Anxi, i.e. Iran (Zürcher 1968, 386; Falk 2015a, 117). The veracity of these Buddhist legends is difficult to assess, but the coin finds from Khotan are suggestive.

The Greek geographer Ptolemy was a contemporary of Kanishka and wrote accounts of Bactria, Sogdia, the Kabul valley and India. In his description of western India he mentions Castana in the context of the city of Ujjain (the capital of Tiastanes, *Geographia* 7.1.63: Stevenson 1932, 153), so it seems his source of information predates his own time and Kanishka's rule. At no point does he mention the Kushan empire. In northern Afghanistan he refers to the Tocharoi people, as discussed above (§4), but there is nothing in his account of the regions represented by the Kushan empire to indicate the chronological context of his sources, which may predate its foundation by Kujula Kadphises. As referred to above, the Bactrian king's envoy sent to Hadrian (AD 117–38) and Bactrian envoys to Antoninus Pius (AD 138–61) could have been sent by Kanishka I.

Figure 2.34 Bronze coin of Maga king of Characene, southern Iraq, 2nd century AD (BM OR.8059, 16.4g, 24mm), found with Kushan coins of Wima Kadphises and Kanishka I by Claudius Rich in Iraq

One coin of Wima Kadphises (Catalogue no. 697 = OR.322) and two of Kanishka I (Catalogue no. 923 = OR.5038; no. 918 = OR.328) in the British Museum were collected in Iraq or Iran by the British official Claudius Rich before he died in 1821 (Hill 1922a, cxcvi). They appear to have been acquired by him as part of a hoard of copper tetradrachms of the kingdom of Characene, situated in Mesopotamia at the north of the Persian Gulf (**Fig. 2.34**). They are evidence of movement between the Kushan empire and the Persian Gulf, probably representing the movement of merchants.

The campaigns of Kanishka I into India as documented by the Rabatak inscription and the silver plate discussed above, make it clear that his approach to at least some of the empire's southern neighbours was hostile. The Buddhist accounts of him, as discussed above (§D.5.1), also imply the same. As discussed (§D.1.2), the *Prophecy of the Li Country* suggests Kanishka had troops from Khotan present in his army when he engaged in his Gangetic campaigns. However, his own claims to have subjugated rulers and the Buddhist claims for his destruction do not tell us much about the states then existing on his southern borders. The contemporary coinages of the Yaudheyas, and possibly the Kunindas, in the Punjab (see §B.6 above and §E.6.1 below) and of Ayodhya and the Kosam in central northern India continued to circulate, a sharp contrast to the campaigns of Kujula Kadphises and Wima Takto in which the minting of their coins displaced existing issues in the regions they conquered. This suggests that whatever the intent, or Kanishka's (technically Nokonzok's, as it is primarily through him we hear of the events) presentation, of the campaigns these kingdoms retained their autonomy throughout his reign (see §B.6 above).

D.6.1 Ayodhya

Coins attributed to Ayodhya (Saketa in the Rabatak inscription and Chinese sources) (see **Fig. 2.26**), are found in hoards with Kushan material from the northern part of the Gangetic plain. At least six hoards (CSH: nos 20, 25, 28, 33, 34, 40) have been reported as containing both Kushan coins (Wima Kadphises, Kanishka and Huvishka) and coins reportedly in the names of Satyamitra, Bhasatamitra and Aryamitra. These hoards likely result from the large-scale export of heavy Kushan tetradrachms in the latter part of Huvishka's reign (see §D.1 above), combining with the existing local circulating coinage at the time. The Ayodhya types are collectively known as the bull and cock series, for their reverse and obverse designs respectively, and generally weigh 6–8g with quarter units of a little under 2g. In the limited literature they are described as 'post-Kushan' (Pieper 2013, 350–1; Mitchiner 1978, nos 4760–70). Mitchiner lists six kings (Ajavarma, Kumadasena, Vijayamitra, Satyamitra, Devamitra and Aryamitra) and dates the final four between the late 3rd century and early 4th century. This seems unlikely given they are found with Kushan coins exported from the empire in the period AD 160–70. More plausible is that these coins were already in circulation when the Kushan coins arrived, and if their thick modules and die striking were influenced by Kushan practice then it was probably the Wima Takto issues of similar weight.

Unfortunately, though Saketa/Ayodhya is well attested in literary accounts, especially through its association with the legends of Rama, it has been subject to only a few preliminary test trenches (see Lal's comments in Ghosh 1990, vol. 2, 34–5) and no substantive body of inscriptions has come to light. As a result any account of its political history during the Kushan period is highly speculative.

D.6.2 Magha kings of Kosam

The evidence for the Magha kingdom, centred around Kosam to the south of Ayodhya, is particularly good for this period (**Fig. 2.35a–c**). In addition to the mention in the Puranas (as Meghas, Pargiter 1913, 73) and coins, there are a series of private donations at the site of Bandhogarh which record the names of the kings with dates (**Table 2.5**). These are published in the *Epigraphia Indica* and summarised in several other places (Shastri 1979; Lahiri 1974, 126). The inscriptions date from the year 51 to the year 139 and employ the system of dark and light fortnights familiar from other regions, but not used at Mathura where the Kushan era dominated. It is therefore nearly certain that the reckoning is the Śaka era, and thus the period from AD 129 to 217 is indicated. The older equation of the era of Kanishka and the Śaka led many authors (Lahiri 1974, 129–30) to erroneously attribute these inscriptions to a post-Kanishka context, and the respective dating of the inscriptions has implications for allied disciplines such as art history (Harle 1974, 19).

In addition, Kosam has been subject to excavations. Those of Sharma (1960) between 1957 and 1959 yielded 124 coins of which 29 were identifiable and included both six of the Mitra kings (**Fig. 2.36**) who preceded the Maghas and two of the Maghas themselves. Before the resolution of Kushan chronology it was widely assumed the Kushans also employed the Śaka era and this would have created a gap

large enough for Kanishka to have occupied the city between the Mitra and Magha kings. However, it seems that the Kushans never administered the region in which the Magha kings maintained their autonomy, and in which cultural factors like dating and coins remained unaffected by Kushan styles.

However, Kosam also offers some complications (Sharma 1960; Ghosh 1990, 212–15). Not only was a sealing of Kanishka found in the city (Shrava 3; Skinner 11), but the nun Buddhamitra dedicated three images of the Buddha early in Kanishka's reign, dated year 3 [or 2] (Shrava 10; Skinner 17), year 3 [or 6] (Shrava 28; Skinner 18) and illegible, but possibly also year 3 (Shrava 19; Skinner 19). Coins of the Kushans were also found in the city, and Kushan hoards in the region contain only Kushan examples without the local Magha coins (unlike those of Ayodhya just discussed, §D.6.1).

First, we need to entertain the possibility that the sealing is in fact that of Kanishka II. It uses the complete set of Kushan titles (*maharaja*, *rajatiraja* and *devaputra*) which, as has been noted in the past, only become firmly established in dating formulae under Huvishka and Vasudeva, and all conjuncts *sya* are finished with a long tail rather than depicted as the combined characters *sa* and *ya*. However, it is a sealing, whose place of composition is unknown, and most of our evidence comes from private donative inscriptions at Mathura, whose practice might diverge significantly from that of official seals.

Secondly, in this case the numismatic evidence is mostly irrelevant to understanding questions of political control. The Kosam excavations have yielded diverse coins from regions further west, including not only the Kushans but also the later Nagas, whom no-one would suggest exercised any influence over the region. In this case the presence of coins is simply a result of an eastward flow of copper coinage apparent over several centuries. The majority of Kushan hoards in the area are a result of the devaluation in the reign of Huvishka (see §D.1). This point was recognised by Gupta (1953) at a relatively early stage in the study of Kushan coins, though he would later revise his opinion (Gupta and Kulashreshtha 1993).

This leaves just the inscriptions of Buddhamitra, which have been misunderstood in the past as a result of the failure to recognise the interconnection of art historical, political and religious factors at play. Buddhamitra was responsible for three images at Kosam, dated in the year 2, 3 or 6, both employing Mathuran-style dating formulae and likely imports from the workshops in that city. Skinner has suggested, plausibly, that the different dates may have been misinterpreted and these very similar sculptures were probably established at the same time in year 3. That Buddhamitra was working in the reign of Kanishka I is demonstrated by an inscription of her niece, Dhanavati, in the year 33, from Mathura, indicating that was probably the residence of her family (Skinner 57). She was also mentioned in a dedication of an image by the monk Bala who established an image at Sarnath to the east in the year 3 (Shrava 13 and 14; Skinner 20a and b). Bala also established a similar image in Sravasti, north of Ayodhya, at an illegible date (Shrava 5 and 6; Skinner 21a and b). At Sarnath, Bala

Figure 2.35a–c Copper coins of Nevama[gha], Vijayamagha and Sivamagha, Magha kings of Kosam (Kaushambi, U.P), 2nd–3rd century, with bull design and inscribed with the kings' names in Brahmi script a) 1894,0507.1543, 4.42g, 19mm, b) BM 1853,0301.107, 2.84g, 15mm, c) 1853,0301.104, 2.92g, 14mm).
The low weight, irregular flan and style of Magha coins is unrelated to contemporary Kushan numismatic practice, and this might explain why they were not hoarded together. Though the Magha kings were close contemporaries of the Kushans they never adopted any elements of coin design, preferring types more in keeping with the existing tradition of the Gangetic valley

received support from a mahaksatrap named Kharapallana and a ksatrap named Vanashpana, both of whom are otherwise unknown. Again, where dating formulae are used they conform to those found at Mathura, rather than local practice, and likely these are imports as well.

It is, of course, possible that Bala and Buddhamitra accompanied Kanishka's army and they set up their images with official patronage in occupied territory, but it seems unlikely. None of the images appear to have been damaged or removed subsequently. It is more likely that the images

Figure 2.36 Copper coin of Agnimitra, king of Kosam, with bull and hill/tree in railing type, inscribed with the king's name in Brahmi, 1st century AD (BM 1904,0307.1, 7.26g, 20mm).
The Mitra kings preceded the Maghas as kings of Kosam

King	Inscriptions/Seals			Contemporary Kushan rulers
	Found in	Śaka era	AD	
Magha(?)				Wima Kadphises (*c.* 113–27)
Bhīmasena	Bandhogarh	51	129	Kanishka I (*c.* 127–51)
	Ginja Hill, Rewa	52	130	
	Bhita			
Poṭhasiri	Bandhogarh	86, 88	164–6	Huvishka (*c.* 151–90)
Bhadramagha	Kosam	81, 83, 86, 87	159–65	
Bhaṭṭadeva	Bandhogarh	90	168	
Śivamagha I	Bandhogarh (?)			
	Kosam (?)			
	Rajghat			
Vaiśravaṇa	Bandhogarh	107	185	
	Kosam			
Śivamagha II	Bhita			Vasudeva I (190–230)
Vijayamagha	Kosam			
Bhīmavarman	Kosam	122, 130, 139	200–17	

Table 2.5 Well-attested Magha kings following Shastri (1979). Note that half a dozen or more names of other kings are attested but cannot currently be accommodated in a history of the dynasty due to a lack of evidence

were made in Mathura itself, and inscribed there with the dating formula reflecting local practice, and likely not even noticed in their final destination. A similar explanation is likely for the inscriptions on the images, dated in the reign of Vasishka, which have been found at Sanchi (Skinner 182 and 186; Shrava 58; Willis 1999–2000, 270).

So Bala and Buddhamitra do not indicate political control; it is not even clear that the satraps mentioned are Kushan subordinates (though descendants of the Mathuran satraps seem plausible). However, the inscriptions do demonstrate that two rich monastics could safely ship sculptures into the territory of both Ayodhya and the Magha kingdom in year 3, or between the years 2 and 6, of Kanishka's reign, an idea which seems to be at odds with the notion of a war-torn middle Ganges experiencing the depredations of an invading army, sieges, and clashes of arms.

All of which leaves us with an essentially intractable problem. Nokonzok, a high official who was an eyewitness to Kanishka's activities, indicates an extensive conquest and a hostile disposition towards the kingdoms of the middle Ganges (and even further east), but all of our contemporary evidence on the ground suggests continued autonomy for the states and an apparently amicable relationship. Likely this will remain unresolved without further evidence and study of the Gangetic kingdoms.

D.6.3 Western Satraps (*kṣatrapa*)

Much discussion has been had about the relationship between the Kushans and their neighbours in western India, the satraps who succeeded Castana, king of Ujjain. Mistaken chronology has focused much of the discussion on the possibility that Castana was a subordinate of Kanishka I, but his reign is likely to have ended earlier, as it began *c.* AD 78, 50 years before Kanishka I (Mukherjee 1988, 76–7; Chakravarti 2014, 52). Castana was the founder of the dynasty of Western Kshatrapa (satrap) rulers in western India which lasted until the 4th century. His coinage and inscriptions show him to be the successor of the Kshaharata satrap Nahapana, but with his kingdom based in Ujjain. He was mentioned by Ptolemy in his *Geographia* as Τιαστανος ruler of Ujjain (7.1.63: Stevenson 1932, 153). He is mentioned as grandfather of the Western Satrap Rudradaman I in an inscription dated to year 52 of the Śaka era, i.e. AD 130 (Banerji 1921–2). Rudradaman (**Fig. 2.37**) continued to rule through Kanishka's reign as he is named in another inscription *c.* AD 150, and it is asserted in modern scholarship that he was a subordinate of Kanishka I's successors (Sircar 1951b, 185–6; Chakravarti 2014, 52). As Narain (1968, 209) has pointed out these claims have no evidential basis. The evident non-relationship between Kanishka I and Rudradaman has also been argued as good reason to doubt the *c.* AD 127 date for Kanishka I's accession (Basham 1968, 434; Mukherjee 2004, 28–9, 244). Part of the confusion over the relationship between Castana and the Kushans stems from the identification of a sculpture from the Mat sanctuary as Castana's portrait (Rosenfield 1967, 145–6, fig. 3). The image has been identified as of Castana by its inscription (reading *ṣastana, mastana or ṛastana*; Lüders 1961, §100), by choosing the reading of the first letter as *ṣa*, even though this is a late Kushan to early Gupta form of the letter. All of these readings assume late Kushan or post-

Kushan forms of the letters suggesting a later date for the inscription than the reign of Kanishka I. It is clear that the evidence for this being the Castana who ruled in western India remains unconvincing.

D.6.4 Samatata and eastern India

In eastern India two series of coins imitating Kanishka I's gold and copper coins are known. Both series show the penetration of his coins into Bengal (gold) and Bihar and Odisha (copper); the imitations do not indicate direct contacts, but show the flow of coinage in the region. The Bengal gold imitations (D-imit.G1-i) were made in the east Bengal kingdom of Samatata (Bose and Nasir 2016, 143–7, 183).

The coinage of Samatata is now relatively well known, and good summaries are provided by Mitchiner (2004, vol. 2, 1238–58) and Rhodes (2016; see also Bose and Nasir 2016, 142–84). Their attribution to the ancient Samatata is confirmed by reported find spots but the dating is more complex. The earliest types of the coinage copy an obverse and reverse design from Kanishka I, but are followed by types (Rhodes class A; Bose and Nasir type 2) which replace the obverse with a design based on the Gupta archer-type coinage.

The most important chronological marker for the Samatata series is Rhodes type D which carries the inscription śrī śaśaṅka, naming Śaśāṅka the king of Bengal in the early 7th century. Samatata types with Śaśāṅka's name intervene in the series placing all earlier types (the Kushan types, Rhodes A through C, Bose and Nasir types 1 through 9) before AD 600; but scholars disagree by how much.

There are two distinct chronologies, and Mitchiner (2004, 1238–58) presents what might be considered the more intuitive chronology assuming the copies were made when the prototypes were current in the 3rd–4th centuries, while the Gupta types are attributed to the period of the Gupta empire in the 5th century AD, and assumes they continue until the mid-6th. Rhodes takes a very different view. He argues that the series shows far less variation in type or style than would be expected over a lengthy period. Since only the Kushan-style examples and three of his classes predate the datable Śaśāṅka types (*c.* AD 600–30) he places them entirely in the 6th century AD. Bose and Nasir base their typology on Rhodes' work and give nine types preceding Śaśāṅka. Both chronologies are speculative and until further evidence emerges from hoards and excavations the dates they propose for the Kanishka I imitations must be used cautiously.

These reconstructions do, however, imply that the Kanishka coins must have been exported much earlier than the Samatata coinage was made and must have remained available for some time before a local coinage began, as early Kushan gold would have ceased to circulate in the north-west by the 3rd century, as their successors' coins were debased.

The Bihar/Odisha imitations, commonly known as Puri-Kushan (D-imit.C2-i, -iv) were in their turn copies of copies of Kanishka I coins. The initial copies were current in Uttar Pradesh (D-imit.C1-i, -ii), where they were made to supplement the supply of exported Kushan coins following the reduction in weight standard during Huvishka's reign (Jongeward and Cribb 2015, 243–50).

Figure 2.37 Silver dramma of Rudradaman, inscribed in Brahmi with the king's name and titles, showing a generic bust of the king on the obverse and crescent on hill symbol, over water and flanked by moon and sun, on the reverse (BM 1889,0105.73, 2.19g 15mm). The denomination and obverse design were derived from the Indo-Greek and Indo-Scythian coinages which preceded the Kushans, while the symbols were drawn from the indigenous north Indian coinage tradition

Like the gold coinage of Samatata, the Puri-Kushan coins undoubtedly post-date Kanishka's reign, probably being issued in the 3rd century, but they are likely to have served a different purpose than the imitations in Uttar Pradesh. The Puri-Kushan types are cast and relatively consistent in their iconography, being followed by a group which add a mark of value, *taṅka*, with three hills (D-imit. C2-iv), almost certainly representing the official issue of an eastern Indian state, whereas the Uttar Pradesh imitations supplemented the limited official coinages of the region and imported Kushan coins. The similarity of the latest Puri-Kushan coins to cast coins from Odisha with couchant bull obverse and inscribed reverse *śrī naṅda*, dated to the post Gupta period (Tripathy 1986, 84–9), suggests that the Puri-Kushan coinage lasted into the early 6th century.

E.1 Huvishka, c. AD 151–90: historical account

There is little to be discovered about the reign of Huvishka from written sources (**Fig. 2.38**). The *Rājataraṅgiṇī* includes Huvishka in its account of Kushan kings, as Huṣka, and says there is a town named after him Huṣkapura (1.168–73: Stein 1900, vol. 1, 30–1). It describes the kingdom of Kashmir being largely Buddhist during the Kushan period and the kings as responsible for building Buddhist sanctuaries. Embassies to China from India (Tiandu), which was part of the Kushan empire, are recorded in AD 159 and 161 in the *Hou Han Shu* in the context of the arrival of Buddhism in China (118.10a; Hill 2009, 31–2). The mention of Bactrian envoys to Antoninus Pius (AD 138–61) may also date from his reign.

There are many Buddhist and Jain inscriptions from his reign which use his name in date formulae. Official inscriptions are rare, but the setting up of a hall to provide food at Mathura in the year 28 (*c.* AD 154) seeks merit and blessings for Huvishka (Skinner 50; Bracey 2012b, 210–11; Falk 2015a, 121). It was established by an official whose role is unclear and uses a Macedonian month name rather than the local dating formulae, so likely represents official activity in the city. Falk suggests that this inscription, mentioning alms for the destitute, may indicate 'financial difficulties' and 'political upheaval' associated with problems with the

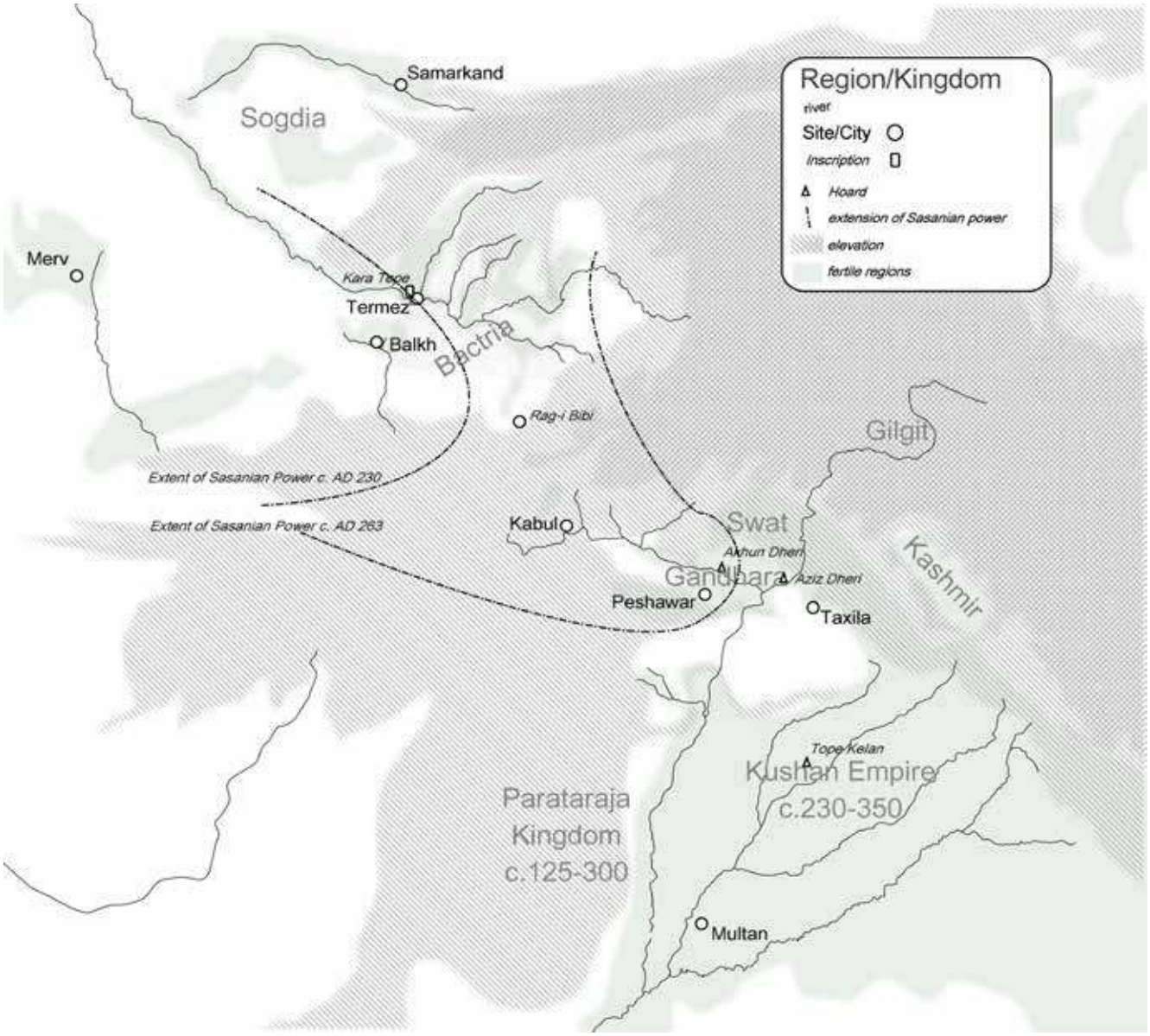


Figure 2.38 Map of the Kushan Empire and surrounding regions in the late 2nd/early 3rd century AD

coinage, but there is nothing in what it says that implies such a problem. He also suggests that two other inscriptions which name Huvishka without titles could also relate to the 'troublesome period' (Skinner 54 and 55; Falk 2015a, 121). Again there is nothing in the inscriptions to indicate any kind of disruption. The problems with the coinage do indicate that there were 'troublesome' times for Huvishka's administration, but not so early in the reign (see below). Two inscriptions at Surkh Kotal (Skinner 48) and Mat (Skinner 45; Shrava 66) do, however, point to troubles earlier in the reign, but of different kinds.

The inscription at Mat (Skinner 45; Lüders 1961, no. 99) invokes the memory of Huvishka's grandfather, but there is no name given for him. His grandfather is referred to as *satyadharmasthita*, which recalls the Gandhari coin inscription (A.C4) of Kujula Kadphises where he is entitled *sacadharmathita*, both versions meaning 'steadfast in the true law'. The grandfather is also said to have received his kingdom from Sarva-Śaṃdavira, i.e. Śiva. Falk (2015b, 288) also finds a reference to Nana in the inscription, but the reading is unclear. The reference to Śiva, i.e. the Kushan deity Oesho, suggests that Huvishka's grandfather could be Wima Kadphises, on whose coins Oesho/Śiva dominates, or the reference to the title steadfast in the true law could be a reference to Kujula Kadphises; both are inferences from limited evidence and insufficient to be certain. From a chronological point of view the end of Kujula Kadphises' reign *c.* AD 90 is about 60 years earlier and the end of Wima Kadphises' reign *c.* AD 127 is about 24 years earlier than the accession of Huvishka. Both are possible, but Wima Kadphises is more likely to be his grandfather in view of the passage of generations. Such a solution could make Kanishka I his father or his uncle. Huvishka's name as a diminutive of Wima, also makes it likely that his grandfather had that name, as the repetition of naming elements by grandchildren was a fairly clear pattern amongst the Kushans. The Mat sanctuary, however, is more likely to have been founded in the name of Wima Takto, whose sculpture was located there and its inscription describes the foundation of the shrine, which would suggest that Wima Takto, whose reign ended *c.* AD 113, about 39 years before Huvishka's accession, could be Huvishka's grandfather. The

title *satyadharmasthita* could have been inherited from his father, and be the equivalent of the titles ΡΑΡΤΟΓΟ (righteous), ΛΑΔΕΙΓΟ (just) which appear in his Dasht-e Nawar inscription, and having Oesho/Śiva's support could likely be said of any Kushan king. If Wima Takto was his grandfather then he would most likely be Kanishka I's brother or cousin. Unless more inscriptions are found we will never be certain of his status in the Kushan succession. One additional object, a very worn coin-like piece found at Sonkh (see §E.2 below) refers to a Kanishka, son of Huvishka, but it is unclear who it is referring to. The Huvishka mentioned on this coin could be the Kushan emperor, but there is insufficient evidence to be certain.

Another inscription from Huvishka's reign, found at the royal sanctuary at Surkh Kotal, also seems to point to problems, but they also relate to a period much earlier than the difficulties with the coinage. The inscription might refer to Huvishka, but not by name, only by his titles ΡΑΟ (king) and ΒΑΓΟΠΟΥΡΟ (son of god) (line 8), unless this is a reference back to Kanishka who is mentioned earlier in the inscription (Skinner 48; Curiel 1954; Maricq 1958b; Benveniste 1961, 114–40; Gershevitch 1979; Sims-Williams 2012c, 78–9). It is also unclear from the inscription when the problems occurred, as it simply says that the sanctuary had been attacked and abandoned until restored in the year 31. The inscription tells us nothing about when in Huvishka's reign, or potentially before, the site was abandoned. There is no indication or evidence of the identity of the enemies who attacked the sanctuary or why they caused it to be abandoned. The sanctuary is in a remote place and its attackers could simply have been local bandits, rather than an invading force. Part of the reason it was abandoned seems to have been the lack of water and the restorer has a new well built so it can be occupied again safely. Mitchiner's suggestion (1978, 442) that Huvishka's troubled times was caused by an incursion by the nomad Ruan Ruan (or Ru Ru) people does not accord with the Chinese accounts of this group as creating problems for other Inner Asian peoples in the late 4th century and not earlier (*Wei Shu* 43, 101; Sinor 1990, 291–4).

There was originally a portrait sculpture of Huvishka at the Mat sanctuary but only its pedestal survives. On the pedestal there is an inscription describing aspects of the sanctuary (Skinner 45; Shrava 66), which like the Surkh Kotal sanctuary had fallen into disrepair. As at Surkh Kotal a water supply was part of the restoration as the inscription records the building of a tank. There is no date in the inscription so it is difficult to interpret how it connects to other indications of crisis. The inscription also stresses Huvishka's descent from an earlier Kushan king, his grandfather and his kingdom bestowed by the gods (see above, this section).

The numismatic evidence for troublesome times consists of an interruption of engraving quality in the dies used at the gold mints *c.* AD 176, and a reduction in weight of the copper coinage (discussed below) which occurred in the middle of the reign but may not be directly connected. The obverse dies for the gold had to be repeatedly recut or new dies were cut by very inexperienced hands. The number of estimated dies for the gold coinage before (*c.* 110) and after (*c.* 174) the crisis suggests it took place in about the 22nd year of his reign (give or take two or three years either way, i.e. *c.* year 46 of the era founded by Kanishka I, *c.* AD 172, if the production of dies was regular, but between AD 168 and 176 if there is unevenness in the use of dies). The inexpert manufacture of the dies could also have had an impact on the length of their usage, as badly made dies would crack more easily, so there is a strong possibility that the dies were not being used at the same pace before and after the crisis.

The crisis took place at the main mint at the end of the third phase and lasted through the fourth phase, and at the subsidiary mint during the end of phase three. It seems to have lasted a few years. The disruption could have been the result of internal conflict or external attack, but it does not seem to have had any impact on the quality of the gold content of the coinage or on the production levels, as one might expect in such circumstances. Another cause may have been a physical disaster such as an earthquake, but one would not expect to see such an overall effect on both mints which were located far apart, north and south of the Hindu Kush. The impact seems to have been on the workers at the mint, so perhaps was plague. This seems plausible as the so-called 'Antonine plague' or 'Galen's Plague' (Littman and Littman 1973) was causing epidemics in the Roman world from *c.* AD 165–80. This may be connected with the epidemic which affected the Chinese army *c.* AD 162 (*Hou Han Shu* 59.8). A Gandhari inscription (Skinner 78; Shrava 197; CKI 159; Skinner discusses this 2017, 54–5), dated in the 51st year of the era founded by Kanishka I, i.e. *c.* AD 177, from central Afghanistan (Wardak), wishes blessings on Huvishka to flow from the foundation of a stupa (**Fig. 2.39**). Could this be a reference to the crisis?

As well as the disruption in the quality of production for gold coins, the copper mints also experienced substantial problems during Huvishka's reign. These problems are also indicated by a deterioration of quality in engraving, with narrow crude versions of the images appearing, but more significantly by a drop in weight. Alongside the deterioration in die engraving the weight standard fell so that before the middle of the reign the weight of the standard copper coin at the main mint dropped from *c.* 16–17g to nearer 12–13g. As the crisis deepened the weight of the coin dropped further with examples in the style of the main mint weighing as little as a few grams being made. It appears as though the copper coinage system was in collapse. As the weight dropped, unofficial imitation also began as people recycled full-weight coins into lighter copies, often as light as 1g, distinguished from the official coins by their disorderly engraving. The replacement of full-weight official coins by light-weight unofficial imitations provides an example of the working of Gresham's Law (see §D.1.1 above), that bad coins drive good coins out of circulation. The remedy at the gold mints was the employment of new die engravers who restored the quality of the coin dies, but at the copper mint a more radical remedy was needed. The copper coinage was re-established by the official reduction of the weight standard to about 10g. These problems seem to have been more pronounced at the main mint and it seems to be the main mint which imposed the new lighter standard. Coinage at the subsidiary copper mint in Gandhara seems to be less

Figure 2.39 Bronze water pot used as a Buddhist reliquary, found in a stupa at Wardak in central Afghanistan, with coins of Kanishka I and Huvishka (BM 1880.93, bronze, 176mm x 169mm; Skinner 79; CKI 159).

In the Kushan period it was a common doctrine that a Buddhist donor could share the spiritual merit they accrued through their donation. The merit from the private donation recorded on this pot dedicated in the year 51 (*c.* AD 177), was shared with family, community and the Kushan king, Huvishka

affected as there are full-weight unofficial imitations of the 16–17g issues and when the standard is lowered it seems to be reduced to *c.* 12g, and only gradually falls to the 10g standard. Whereas the main mint imitations are all copies of the heavier standard coins, those copying the subsidiary mint coins tend to imitate the second period of coinage at *c.* 12g, with the copies ranging from *c.* 10 to *c.* 6g. Some coins of the Gandhara mint have the names of officials on them, suggesting some autonomy in their production, and this combined with its smaller more local production might explain the difference in its response to the change in weight standard. The Kashmir copper mint appears to have ceased operation before or during the crisis and the Mathura copper mint only began after the new lighter weight standard had been adopted.

The remedy of reducing the weight standard of the copper coinage to deal with adverse pressure on the monetary system was apparently seen to have worked as it became a standard practice for the rest of the Kushan period, as the weight of the standard copper unit was reduced step by step over the following reigns until it weighed only a few grams in the closing reigns of the dynasty.

E.2 Huvishka: problems of chronology

The dating of the reign of Huvishka relative to Kanishka I and his successor Vasudeva I is well established through the dated inscriptions mentioning his name. There are some uncertainties in the precise year, as the last inscription to mention Kanishka is in the year 23 (Shrava 57; Skinner 43), the first and last of Huvishka in the years 26 (Shrava 65; Skinner 49; Schopen 1987, 101–10) and 60 (Shrava 124; Skinner 85), and the first inscription of Vasudeva in the year 64 (Shrava 127; Skinner 88), but these allow only very small margins of error. The main problem concerning the dating of his reign has arisen through the failure to recognise Vasishka and Kanishka III as later kings, leading to them being placed ahead of his reign or interrupting it, leading to erroneous theories of dual kingship.

A further problem has arisen through the discovery of a coin-like piece as a site find in the vicinity of the excavations at Sonkh, near Mathura (Gupta 1973; 1988a, 132–3: Gupta and Kulashreshtha 1994, 147–8, 161–2; Göbl 1984, 103, type 984). The obverse of the coin depicts a standing male figure in Kushan tunic, holding a staff in his left hand, and resting his right hand on his hip with a triangular detail below the hand, flanked by a vertical Brahmi inscription reading *huviṣkasya*. The reverse shows a standard on the left flanked by two horizontal lines of Brahmi inscription reading *putra kaṇikasya*, all in a square frame. This inscription was translated by Gupta as 'Kanishka son of Huvishka' and there is no reason to doubt that reading. The standard is unclear, but in some photographs appears to have a square device at the top and bottom.

The piece does not fit into the coinage system of the Kushan period. Its style and the use of a square frame on the reverse looks most similar to the series of coins issued at Panchala (Ahicchatra). As discussed below (§K–N.6) Panchala coins are usually dated to a pre-Kushan (or at least pre-Kanishka) period but this is probably erroneous and likely the Panchala series ran through the period of Kushan rule until the mid-3rd century AD (**Fig. 2.40a–c**). From the names and dress of the figure it does seem to relate to the Kushans, as these names are not well attested outside the dynasty (see CKD 137 for the female name Huvisae). It could be explained as a reference to Kanishka II who ruled about 40 years after the end of Huvishka's reign, or to a Kanishka, son of Huvishka, who never came to the throne (there are no royal titles on the coin) or to an otherwise unknown ruler. Gupta and Kulashreshtha (1994, 65–9) suggest that it relates to Kanishka I, but since the Rabatak inscription was discovered we have confirmation that Wima Kadphises was his father. One plausible explanation is that Huvishka had a son named after his predecessor who never attained the throne, but had the authority to strike local coins at Mathura or nearby. As Kushan names often reference grandfathers this is plausible if Huvishka is the son of Kanishka I.

Gupta further discussed this strange coin and used it to mistakenly suggest (Gupta 1988a, 133–4; Gupta and Kulashreshtha 1994, 161–72) the possibility of there being three kings called Huvishka. He proposes that the first Huvishka came between Wima Kadphises and Kanishka I and attributes to him the coins issued by Huvishka's subsidiary mint at the beginning of its first phase (E.C2-i, obverse 1A and 2A). He links their types and tamgas with those on Wima Kadphises' coins, unaware that these obverses are die-linked with Huvishka's regular coins and that the same issue's quarter dinars share a die used at the end of Kanishka I's reign (quarter dinar reverse 4a). So according to Gupta's logic the coins of Huvishka would be assigned to Huvishka II. To his Huvishka III he attributes the coins with sceptre/spear types of main gold mint phase v and

Figure 2.40a–c Copper alloy coins of Bhumimitra, Phalgunimitra and Indramitra, kings of Panchala, with images of Bhumi, the earth goddess, the star goddess Phalguni and the god Indra and inscribed in Brahmi with the kings' names (a) BM 1881,0202.10,14.90g, 24mm; b) 1890,0604.37, 17.30g, 23mm; c) 1894,0507.1254, 5.37g, 16mm).
Some coins of this series are of a similar weight and fabric to the Sonkh coin inscribed 'son of Huvishka'. Most Panchala coins are of a dark copper hue but a significant minority have a pale corroded finish with deep cracks around the edge. They are surprisingly light for their size, as the 'son Huvishka' coin also was when examined by one of the authors

subsidiary gold mint phase iv. Again, such a division is unnecessary and ignores the die links existing between the phases of the coinage. He likewise divided the copper coinage between his three kings on the basis of the changing weight standard, including underweight imitations as his category for the last of the three. The coins do not conform in any way with his rationale for such a re-attribution. The evidence only supports the identification of a single Huvishka.

E.3 Huvishka: royal images

The missing portrait statue of Huvishka from the Mat sanctuary is unfortunate. We may well have his lower half among the sculptures from Surkh Kotal (see §E.1 above), but the three surviving pieces cannot be attributed to particular kings.

A painting on silk in a private collection, thought to have been found in Xinjiang, carries part of an image of a Kushan king who has been identified as Huvishka (Marshak and Grenet 2006). The king wears tunic over leggings, a cloak, and a typical early Kushan headdress. The headdress has a decorated brim painted in red and gold, and two ribbons hanging from the brim above the king's ear. He has a small moustache, but no beard or sideburns. His head is surrounded by a halo and above his head a winged naked child holds a diadem with trailing ribbons. The ribbons could be the feature which looks like hair strands on coins of Wima Kadphises and the Buddhist pyxis of Vasudeva I. He holds a sceptre/standard in his left hand, surmounted by a crescent and a pine-cone-shaped finial. Behind his left shoulder two figures stand wearing Kushan-style tunic and leggings: the one to the front holds a bowl, but his headdress is lost off the edge of the cloth; the second one holds a spear and appears to wear a helmet. The painting is missing its left-hand side, apart from the head of a third attendant. Radiocarbon analysis dates it to the Kushan period (*c.* AD 74–258). The attribution to Huvishka is based on the figure's lack of beard and his posture, which resembles the king seated on mountain coin design, and his halo.

The attribution to Huvishka, and to the second part of his reign (Marshak and Grenet 2006, 950) on the basis of its similarity in some respect to his coins is too simplistic, as one could also draw attention to the brim and the scroll on the side of the king's headdress which appear on the coins of Wima Kadphises and Kanishka I, but not on the coins of

Figure 2.41 Bronze roundel, as illustrated by James Prinsep (1835, pl. XXXVI, no. 15), from a plaster cast of the example in the collection of General Ventura. This was the first example of the Kushan roundels to be published and represents type 12a (see Fig. 2.42)

Huvishka, as identifiers. The image is certainly of a Kushan king and the religious contexts pointed out in Marshak and Grenet's paper are clear enough, but it does not have to be a representation of a specific king. The imagery of kings is not always the same as that of their coins, as we have seen in the Mat sculpture of Kanishka I where he wears an overcoat not shown on his coins, and the Buddhist pyxis which represents a king called Vasudeva in court clothes but Vasudeva I's coins show him in armour. We have also seen that coin designs do not necessarily represent actuality as Kanishka I is shown both bearded and with a clean-shaven chin on his coins (§D.3). Huvishka is shown with a halo consistently, but so also are all his successors, and to a lesser extent his predecessors Wima Takto, who is the first to be depicted with a halo (B.C6-i), and Kanishka I, who is shown with a halo on some issues from both the start (D.C3-i and -ii) and end of his reign (D.C2-iii). As remarkable as it is to have such a graphic image of a Kushan king, one cannot be certain that it is Huvishka.

Another form of imagery has also been identified as representing Huvishka. Bronze brooches with Kushan designs are described in the literature as representations of Huvishka because of some similarities to his coin imagery (Göbl 1972; Zavyalov 1979a; 1979b; Kubik 2019). These bronze roundels are one-sided and have a loop on the back to attach them to clothing. The images on the front normally show a male figure wearing Kushan dress. The earliest published example appeared as a drawing in an article by James Prinsep (**Fig. 2.41**), where he illustrated a plaster cast taken from a bronze brooch from the collection of General Jean-Baptiste Ventura (Prinsep 1835, 630, pl. XXXVI, fig. 15; Göbl 1972). His drawing shows a figure mounted on an elephant walking towards the left. The figure appears to be wearing an overcoat, with the tails of a cloak flowing behind, and holding a sword at his waist in his left hand and pointing forwards with an elephant goad in his right. The figure has a rounded cap, with diadem ties behind, an earring and the arc of a halo in front of his face. The elephant is dressed with straps and perhaps a saddle. The diadem ties and Kushan dress suggest that a Kushan king is represented. Because he is mounted on an elephant, the coins of Wima Kadphises and Huvishka can be seen as close parallels. The rounded cap suggests that Huvishka is more likely, but the correspondence of the design with coin images is not precise.

Since Ventura's piece several other examples of this kind of roundel have been published and discussed (Tanabe 1983; Göbl 1987a). Together their published types add four more designs. In addition to these the authors have seen more designs from collectors and the trade, bringing the total to 13 types depicting male figures in Kushan dress or armour, based on 45 examples (**Fig. 2.42a–n**; **Table 2.6**). There are also two brooches seen with the same fabric as the Kushan figure types but with different designs, one showing a mare suckling a foal and the other a winged child (Eros).

When Prinsep presented the first example (type 12a) in 1835 he illustrated it in the context of Kushan coins and implied its relationship with the coins of Huvishka, even though at that time neither the Kushans nor Huvishka were known by name. The same view was taken by Göbl (1963) and he also attributed to Huvishka a new type (type 1a) he had acquired in Peshawar (Göbl 1972). He later (Göbl 1987a) added examples which he attributed to later Kushan kings: type 11 to Vasudeva II (here Vasudeva I, subsidiary gold mint third phase F.G2-iii and -iv); type 7a to Kanishka II or his successors; and type 6 to the late Kushans (Spätkušānisch). Among these he included an example of type 1a, which had been excavated at Zar Tepe, a Kushan site 26km north-west of Termez, published by Zavyalov (1979a; 1979b). Like Göbl, Zavyalov also identified the piece as relating to Huvishka. Tanabe (1983; 1987), however, questioned the attribution to Huvishka because the figures on the roundels lacked the details seen on many coin images of Huvishka.

More recent collecting has opened up a broader set of imagery on these roundels, which continue to show their association with Kushan kings, but also raise questions about how to identify the figures represented. Two pieces (types 8a and 8b) are clearly representations of a deity rather than of a king, as they show a figure in armour holding a cockerel in his left hand and a spear in his right. This is the normal Gandharan iconography of the Indian god Mahasena, later associated with the Hindu god Skanda/Karttikeya (e.g. Zwalf 1996, 102). Other roundels (types 3–7) are also associated with this deity as the figures on them are shown holding a bird standard like the representations of Mahasena on the coins of Huvishka (E.G1-i, reverse 13a; E.G2-ii, reverses 14a and b). One of the figures with this feature also makes the gesture of offering a diadem, like some of the Kushan gods represented on the coins of Kanishka and Huvishka. So could the images on the roundels represent gods rather than kings?

The halo and diadems of the roundel images are seen in representations of both Kushan kings and Kushan gods. The tall headdress is similar to that worn on the coins of Kujula Kadphises (A.S3-i and A.S4-i, A.C4-i and -ii), Wima Kadphises (most types) and on most rulers from the time of Huvishka's adoption of it late in his reign. The Iranian cap is less common, but is shown on the Soter Megas coins of Kujula Kadphises/Wima Takto (as worn by the reverse

Figure 2.42a–n Bronze roundels of the Kushan period, from the collections of Peter Linenthal (PL) and Heinz Bons (HB): a) type 1a (PL 29.1g, 47mm); b) type 2 (PL 54.6g, 47mm); c) type 3 (PL 47.5g, 47mm); d) type 4 (HB 39.8g, 45mm); e) type 5 (PL 34.2g, 46mm); f) type 7a (PL 40.3g, 47mm); g) type 8a (PL 45g, 47mm); h) type 8b (HB 72.2g, 49mm); i) type 9 (HB 30.8g, 40mm); j) type 10 (PL 66.72g, 54mm; k) type 11 (PL 39.4g, 45mm); l) type 12b (PL 56g, 52mm); m) type 13 (HB 28.3g, 45mm); n) reverse of type 2 showing loop

Type	Figure	Headdress		Zar Tepe	Private collections	Trade	Göbl 1987a	Tanabe 1983	Tanabe 1987	Total
1a	facing right, overcoat, earring r. hand: club l. hand: ribboned torch	halo, pointed hat with ball finial, raised front, crescent on side of brim, diadem ties	mould 1	1*	12† **	3	Huvishka 2/1–4	I-D II-A	I	16
1b			mould 1 (aftercast)		2					2
1c		no halo	mould 2		1				II	1
1d		no halo, pointed hat with ball finial, horns at front, diadem ties	mould 3		1					1
2	facing right, overcoat, earring r. hand: ribboned sceptre	no halo, pointed hat with detail unclear, diadem ties			1					1
3	facing left, overcoat, earring r. hand: leaf l. hand: bird standard	halo, pointed hat with ball finial, details unclear, diadem ties			5					5
4	facing left, overcoat, earring r. hand: leaf l. hand: bird standard	halo, bare-headed, diadem ties			2					2
5	facing left, overcoat, earring, r. hand: diadem l. hand: bird standard	halo, pointed hat with ball finial, details unclear, diadem ties			1					1
6	facing left, overcoat, earring crescent before face, r. hand: diadem l. hand: bird standard	halo, pointed hat with ball finial, details unclear, diadem ties			2		Late Kushan 1/1–2	I-A I-B		2
7a	facing left, overcoat crescent before face r. hand: bag? l. hand: bird standard	halo, Iranian hat, top pointing forwards, diadem ties	mould 1		2		Kanishka II 1/1		III	2
7b			mould 2		1	1				2
7c			mould 3		2					2
7d			mould 4		1					1
8a	facing left, with long hair, wearing armour r: hand: spear l. hand: cockerel	halo, long hair with topknot, no diadem ties	mould 1		1					1
8b		no halo	mould 2		1					1
9	facing three-quarters left wearing armour hands: unclear	no halo, Iranian hat top pointing forwards, diadem ties			1					1
10	facing left, cloak over shoulders r. hand: branch with leaves l. hand: uncertain object	no halo, bare-headed, diadem ties			1					1
11	bust right tunic, arms not seen, no rim	no halo, pointed hat with ornament on front, diadem ties			1		Vasudeva II 1/1			1

Type	Figure	Headdress		Zar Tepe	Private collections	Trade	Göbl 1987a	Tanabe 1983	Tanabe 1987	Total
12a	elephant rider left overcoat and cloak, earring r. hand: elephant goad l. hand: sword	halo, bare-headed or round cap, diadem ties			1***		Huvishka 1/1	II-B		1
12b	elephant rider left overcoat and cloak, earring r. hand: unclear l. hand: sword	halo, bare-headed or round cap, diadem ties			1					1
13	horseman right overcoat, earring r. hand: sword? l. hand: raised?	halo, bare-headed, diadem ties			1					1
	TOTAL									45

* Zavyalov 1979b; ** Cunningham 1854; *** Prinsep 1835; † One example now in a private collection was collected near Rustam in Pakistan (Muhammad Khalid pers. comm. Feb. 2020)

Table 2.6 Known types of bronze roundels

horseman on B.C1, B.C2), Kanishka I (D.G1-ii) and on the first issue of Huvishka's subsidiary gold mint (E.G2-i). These forms of headdress are less frequently seen in divine images on Kushan coins. Mozdooano wears the Iranian cap on coins of Kanishka I (D.G1-iii, reverse 11a) and Iamsho wears the tall hat on coins of Huvishka (E.G1-v, reverse 12a). These occurrences are exceptional, so it seems more likely that these headdresses are depicted on the roundels to identify the figures as kings. There are some images which appear to be bare-headed, and of these type 4 otherwise has all the same attributes as type 3, so appears to represent the same royal person. The elephant riders on type 12 also appears to be bare-headed, but otherwise wear Kushan dress and diadems, so again appear to be royal. It is unlikely to represent the Indian elephant-rider god Indra as he is normally shown in Indian dress and sometimes holding a thunderbolt. The horseman type is very unclear, but like the elephant rider seems to be wearing Kushan dress, have diadem ties and be bare-headed. Only early Kushan rulers are depicted riding a horse. Kujula Kadphises is mounted on his 'Heraus'-type tetradrachms (A.S2-i) where he is shown bare-headed with a diadem. The Soter Megas types of Kujula Kadphises/Wima Takto show a mounted king on the reverse, normally wearing the Iranian cap, but on one type the king is bare-headed with diadem (B.S1-i, 1u).

The bird standard is very similar in form to the lion standard held by Huvishka on some of his late gold coins (E.G1-v). On the coins the lion standard is decorated with ribbons and the bird standard on the roundels is similarly decorated on types 4, 6 and 7. The same ribbons also decorate the torch-like object held by the king on type 1 and the unidentified object, perhaps a sceptre, on type 2. The only coin imagery showing a king holding a standard are two dies used at Kanishka's main mint late in the reign, where the usual spear held in the king's right hand is replaced by a standard with an S-shaped line on top (D.G1-iii, obverse 1A). This has the shape of a bird, but may not have that meaning as it is so simple. This die was being used together with reverses showing the god Orlagno who is shown with a similarly shaped bird on his helmet (D.G1-iii, reverse 12c; see reverse 12a for confirmation of its identity as a bird).

The figure on type 10 is enigmatic. It does not wear Kushan dress so perhaps is a god. The figure is closest in imagery to the figure of the sun god Miiro on the obverse of the main series of Soter Megas coins (B.C1), but lacks the radiating halo. Like the coin image it has the hair dressed in horizontal bands tied with a diadem and a cloak tied at the neck and over the shoulders. The same treatment was also used on Kujula Kadphises' imitation Hermaeus series. The figure holds a branch with a leaf and a bunch of grapes in his right hand in front of his face and raises his first finger. The vine-like branch suggests that the god may be Dionysus. The Soter Megas coinage shows Miiro holding an arrow in the right hand, but also with raised first finger. On types 3 and 4 the figure is also holding foliage, but looking more like a single leaf. The left hand is not seen on the Soter Megas type, but in roundel type 10 it is shown holding an unrecognisable object, rounded at the top and projecting below his hand. The gesture of holding a branch is also seen on three of Wima Kadphises' coin types (C.G1-iii, obverse 1B; C.G1-iv, obverses 1A and 4A). In two of these the king is also flanked by the club he is often shown holding. The king holding foliage is also to be seen on the Kanishka reliquary where Kanishka seems to be shown holding flowers. This image shows the king with his left hand covered, a feature which it shares with two of Wima Kadphises' foliage holding coin types (C.G1-iii, obverse 1B; C.G1-iv, obverse 4A). This is a clear religious reference as it is a gesture of worship in Sasanian art (Errington and Curtis 2007, 122–3, fig. 104; Curtis 2016, 188–9).

The conventions adopted in the imagery of kings on these roundels do not correspond exactly with the royal imagery

on coins. They share some features with the coins, but introduce others which are not otherwise known. The shared features, as noted above, are Kushan dress or armour, headdresses, halos and diadems. Type 1 shows the figure holding a symbolic club like those held by Huvishka on his gold coins, but otherwise the objects held represent a different imagery, some as indicated above related to Kushan gods.

The identification of these representations of kings with Huvishka, Vasudeva, Kanishka II etc. does not, as Tanabe (1983; 1987) has shown, bear close scrutiny. The pointed hat worn by many of the images is unlike any worn by Kushan kings on the coins. There are some parallels, such as the ball finial which appears on coins of Kujula Kadphises (A.S3-i and A.S4-i, A.C4-i and -ii), and only reappears on the coins of Kanishka II (G.G1-i) and Vasishka (H.G1-i). The frontal motif on some of the pointed hats, not always clear, except on types 1d and 11, is also seen on Kushan coins after Kanishka I, and the crescent on the side of the hat on type 1a matches that on Huvishka's early coins (E.G1-i, -ii and -iii, E.G2-i and -ii). All the pointed hats, however, show a feature which is never seen on the coins, because where legible the hat is formed by vertical slats. It is this feature which is discussed in another article, misidentifying it as a helmet (Kubik 2019).

The representations of kings on these roundels were perhaps intended by their makers to represent particular kings, but it would be unwise to identify them solely on the basis of their relationships with specific coin types, as, like the coins, they draw their imagery from a broad repertoire of royal imagery current throughout the Kushan period. As noted above (§D.3) Kanishka I could be portrayed with or without a beard, and Huvishka appeared on his coins with a wide array of costumes and headdresses. It is remarkable that all the images on the roundels lack facial hair, which was a constant for the early Kushans on their coins, showing them with moustaches, beards or heavy sideburns and some later kings exhibit moustaches. The coins only provide one window into the available imagery. The few surviving sculptural images of Kushan kings all differ from the coin imagery of the kings, where their identity is known. The Surkh Kotal royal images have been identified by their discoverers, but all lack labels. Tanabe (1983) pointed to the similarity of the overcoat of roundel type 1 to one of the Surkh Kotal images (Fussman 1983, 35, fig. 12; Rosenfield 1967, pl. 121) because of its wide laddered lapels, but it is no more labelled than the roundel image. The image attributed to Kanishka shows a figure wearing an overcoat (Fussman 1983, 34, fig. 11; Rosenfield 1967, pl. 120), linking it with the labelled image at Mat (Fussman 1983, 37, fig. 14; Rosenfield 1967, pl. 2), but neither match his coin imagery or his representation on the Kanishka casket (Rosenfield 1967, fig. 60) so a definitive identification of the Surkh Kotal images cannot be made. Even the roundel type 10, which bears so much affinity with the Soter Megas coins of Kujula Kadphises and Wima Takto cannot be definitively identified with either of these kings as it is based on the image of a god, which perhaps the creator of the roundel mistook for an image of the king. We have no evidence of when these roundels were made, whether all at one time or spread out over the entire Kushan period, so attribution to a particular king becomes even less certain, as the variations in design could be related to their time of production or to the whim of the artists involved. There is also no evidence beyond the coins of changing patterns of representations of the kings, and the changes seen on the coins could bear little relation to changes in other media.

Tanabe (1983) and Göbl (1987a) have discussed the various ways in which such roundels could be used in ornamenting Kushan dress, as buttons to hold together the Kushan overcoat, or as belt buckles. Their royal nature suggests some official involvement, but real evidence of this is not available. It is interesting that type 1 survives in 15 examples from the same mould version, and four more with the same design, suggesting that large numbers of them were made. The same is also apparent, but with fewer surviving examples for types 3 and 7. An understanding of the imagery, which in some cases represent the king with religious imagery, remains to be achieved.

There are two images from the Mat site, which also recall the imagery of the Kushan king. One has been identified by Rosenfield (1967, 148–9, pl. 11) as representing a Kushan king. It is on the same scale as the labelled image of Wima Takto from Mat and has the characteristic halo, diadem ties and pointed headdress associated with Kushan kings. The figure is seated on a low throne and its hand positions suggest it is holding a club in its raised right hand and sword hilt in its left at waist height. Although Rosenfield's illustration does not show this detail, he stated that the throne had lion legs, as one would expect for a royal image. All these features and the location of its discovery strongly support his identification of it as a Kushan king, but further identification is not possible. The other sculpture has been suggested in the past as a Kushan royal image (Coomaraswamy 1927, 68, fig. 64), but was correctly identified by Rosenfield (1967, 149, 189–90; pl. 43) as representing the god Surya because its throne supporters are horses. It is also significantly smaller (about 60cm) than any of the identifiable royal images. Rosenfield, however, suggested that the figure derived some features from Kushan royal imagery. It has traces to the left of the head of a halo and diadem ties, and the lotus bud (?) and sword held by the figure are very similar in form to the club and sword on Huvishka's coins. The figure also wears a patterned tunic as on Huvishka's later gold coins. The crown looks like a wreath rather than the usual pointed headdress, but resembles the headdress worn by Kanishka I on the Kanishka reliquary. A second feature in which the image departs from representations of Huvishka is the long hair flowing onto its shoulders, which links it more with the long-haired portraits of Vasudeva I on his late subsidiary gold mint coins (F.G2-iv). The identification of the image as Surya is based on the throne's horse supporters; their heads are lost, but they can be recognised by their breast shape and harnessing. It is not surprising to find images of gods alongside images of kings at the site of the *devakula* at Mat.

E.3.1 Royal images on coins

Coins offer a rich repertoire of imagery for this king. His coinage designs reflect a close association in his identity with Wima Kadphises, mimicking his representations, on, or

Figure 2.43 A gemstone seal depicting a haloed figure seated cross-legged on the back of an elephant being presented with a diadem by a winged goddess (BM 1892,1103.182, greenstone, 19mm x 15mm; Callieri 1997, U 17.13).
The mounted figure wears a rounded headdress surmounted by a ball finial suggesting it is the image of a king. The iconography more closely resembles the coins of Huvishka (see 5.E.3) than Wima Kadphises, but both kings show themselves riding an elephant, royal iconography linking the king with the Indian concept of kingship, as exemplified by images of Indra, king of the gods, riding an elephant

emerging from, a mountain, sitting on a low throne, or riding an elephant (**Figs 2.43–2.44**). His attire is very similar to that of Kanishka's wearing a high headdress, tunic and leggings (see E.G1-v, obverse 1A; E.G2-i, obverse 1A) and sometimes an overcoat or cloak. His headdress takes on various forms, rounded or pointed top, elaborate frontal jewel and side ornaments, with diadem ribbons, normally two, but in one case six (three pairs: from the back of the wreath on his headdress, from back of his headdress, and from the back of his neck over his shoulders, E.G1-vi, obverse 1A). In the latter half of the reign the headdress takes on various shapes, rounded or pointed, and on most has cheek-pieces, sometimes with a wreath hung over it (E.G1-vi, looking like horns). The cheek-pieces make it look like a military helmet and perhaps the wreath also has a military connotation. On his early coins at the main gold mint he always wears a tunic, but on later coins (E.G1-v and -vi) often has an overcoat on top, or a heavily decorated tunic. At the subsidiary mint he always wears a tunic, but in the last phase (E.G2-iv) it is heavily decorated and partially covered by a cloak. The decorated tunic could be decorated armour, as his lower half is never visible in this costume, but its evolution out of a tunic in the recutting of E.G2-iii, obverse 1B, suggests that it was understood by the mint as a tunic.

His hair is normally out of sight under his headdress, but on one coin he wears a turban (E.G1-v, obverse 2A) and on another a rounded headdress (E.G2-iii, obverse 1A) which leave his hair, cut over or behind his ears, as on Kujula Kadphises' coins, visible. On his late coins wearing the helmet-like headdresses, the ends of his hair are normally visible below the back of the helmet. Like Kujula Kadphises and some versions of Kanishka I, he is shown with moustache and long sideburns, but no beard. This suggests that the beard sported by Wima Kadphises and Kanishka I were not a normal part of the appearance of the Kushan kings. It could be that they both adopted beards, but perhaps it was a device adopted just for their coinage. Like some images of Kanishka I, Huvishka is often shown with a wart or lesion on his cheek, confirming its function as a mark of royalty. On some coins he can also be seen wearing earrings (e.g. E.G2-iii, obverse 1A) and a torque-like necklace (e.g. E.G1-v, obverse 2A). On both early and late gold coins he is occasionally shown with flames emerging from his

Figure 2.44 Clay impression from a seal depicting a rider on the back of an elephant, holding an elephant goad, recorded as from the Gandharan site called Kula Ḍherī, Peshawar District (BM 1960,0517.1.13, terracotta, 21mm x 19mm; Callieri 1997, S23).
This site yielded a number of impressions reflecting Kushan royal imagery (see Callieri 1997, S22, S17, S18)

shoulders. The king is also shown with a halo surrounding his head on later gold coins (E.G1-v and -vi; E.G2-iv).

On his gold coins the most common representation of the king shows him emerging from the top of a mountain, like Wima Kadphises on many of his coins. On two varieties he sits on top of the mountain (E.G2-i, obverse 1A; E.G1-v, obverse 1A), again like Wima Kadphises on one double dinar die (C.G1-iv, obverse 2A). Another design based on Wima Kadphises' coins (C.G1-iii, obverse 1A) shows Huvishka mounted on an elephant (E.G2-i, obverse 2A), but unlike the Wima Kadphises prototype the king is riding the elephant rather than seated on a throne on its back. Wima Kadphises' throne types (C.G1-iii, obverse 1B and E.G1-iv, obverse 4A) do not find a counterpart on Huvishka's gold coins.

On the early gold coins Huvishka is normally shown holding the hilt of his sword in his left hand, which has often been mistaken for an elephant goad (Chattopadhyay 1967, 73), because of its curvature. In his right hand he holds a club, with pointing first finger on most coins. In his left hand the sword hilt is replaced by a spear, or a standard on his later coins. Like Kanishka I he sometimes holds a spear and on other dies a standard topped by an animal. On one type it looks like a bird (E.G2-i, obverse 1A), but in most other cases it looks like a lion couchant, a device which is very clear on the later coins of Mahi (K.G2-i, obverse 1B). On some Kanishka I coins, the same bird on standard seems to be clear. On his elephant-rider type (E.G2-i) he holds an elephant goad and the branch motif, as held by Wima

Kadphises on his throne types (C.G1-iii, obverse 1B, C.G1-iv, obverse 4A).

Huvishka's copper coins also look to Wima Kadphises for their types, showing him riding an elephant, seated on a throne, or on a mountain top. On his Kashmir coins he is only shown standing (E.C3-i), like Kanishka I, and without the inscription they are easily mistaken for Kanishka I issues, but have a distinctive style. A rare type from the Gandhara mint also shows Huvishka standing (E.C2-ii, obverse 4A), in the same pose.

The commonest design overall used on the copper coins is the elephant rider, where the king is shown in tunic, leggings and cloak, wearing a tall headdress, holding a spear or a sceptre with ribbons, and often additionally an elephant goad, or on a few examples his sword hilt instead of the goad. The king's head is often surrounded by a halo, which sometimes has rays emanating. The elephant and rider normally face to the right. The other two designs vary in their frequency. The king seated on mountain wears the same outfit as on the elephant, but holds a spear or sceptre in his left hand and a club in his right hand. The halo, when depicted, is often in double form surrounding his head and body, and, as on the elephant rider, sometimes has emanating rays. The king normally faces to the right, but occasionally forwards or to the left. The enthroned king has a different form to the Wima Kadphises design as the king is lounging on the throne, with his right leg raised up on the throne, and his left on the floor. On some versions the king has a large sword hanging from his belt and projecting across the front of the throne. A cloth hangs from the front of the throne and the legs of the throne are normally in the form of elephant heads, but sometimes as turned wood columns. The king either faces forwards or to the left, and holds a cup between his hands. The halo is shown in the same forms as on the mountain-top type.

In the main copper mint's first phase the different obverses are all used and in the early dies are well drawn, but later in the phase the designs begin to deteriorate. In its second phase (E.C1-ii) the enthroned king type is commoner than the other two types and is normally facing forwards surrounded by head and body halo with emanating rays. In its third phase all the coins have the elephant rider with a halo round the front of his head and only holding an elephant goad. In both the second and third phases the king's headdress is simplified to three vertical spikes.

The treatment of designs in the early phases at the subsidiary mint in Gandhara (E.C2-i, -ii) is more variable. The elephant design is most common. In the first two phases the king is shown on the elephant type holding a club in his raised right hand, and, when visible, the hilt of his sword in his left hand. His outfit is the same as on the main copper mint's coins, but when he has a halo it is a single halo round his upper body and head, sometimes with emanating rays. On some dies (obverse 1D and 1E) the elephant and king are facing left. The king on mountain type (obverse 2A and 2B) shows the king holding a spear in his right hand and his left hand resting on his hip without the club seen at the main mint. The so-far unique king on throne type (obverse 3A) has the king with both legs up on the throne, but the details of his head and hands are not visible. The standing king type (obverse 4A) shows the king standing in the same way as on the coins of Kanishka I, holding a spear and making an offering at a small altar.

In phase three of the Gandhara mint (E.C2-iii) a new set of engravers cut the dies. It is possible that a new mint was established taking over the work of the mint responsible for the first two phases, as the personal name on the reverse is no longer featured. Again the elephant-rider type is the dominant design, with only a smaller number of dies featuring the king on mountain and even fewer featuring the king on throne. The elephant-riding king is wearing the usual costume with an overcoat (the details are not very clear, but the overcoat also looks like a cross-lapelled riding jacket) and headdress and holds a spear, a long ankus or a two-pronged standard in his right hand and the hilt of his sword in his left (not always visible). He normally has a halo round his head. The king on mountain wears the same outfit and also holds a spear, normally in his left hand, and rests the other hand on his hip or thigh, but in a few cases he raises his left hand. He often has a halo surrounding his head. The king on couch is only known from a few dies and shows the king in the same attire sitting upright with one leg on the throne and one on the floor. No examples are clear enough to see the cup he is holding. On all examples his upper half is surrounded by a halo or two halos. One curious design, known from a single die (obverse 3E), shows the king with both legs on the throne (which has a curved shape), resting on one elbow and holding a club with his raised right hand.

The Gandhara mint's fourth and fifth phases (E.C2-iv and -v) only feature elephant-rider types, wearing the same outfit and headdress as on phase three and holding a long elephant goad. On a few rare examples the elephant rider faces to the left.

The Kashmir mint coins (E.C3-i) all show the king wearing tunic and leggings with a low version of the headdress, holding a spear in his left hand and making an offering at a small altar with his right. As on all his other coins he has a moustache and long sideburns. The designs of the Mathura mint coins (E.C4-i and -ii) are all copies of the designs of the main mint, featuring all three forms of representation of the king. They are distinguished from their prototypes by their style of engraving and often by the king's large head. In the second phase the designs are simplified, so that the king on mountain and king on throne are only distinguished by the position of the king's legs, as the mountain rocks and the throne are omitted.

The overall effect of Huvishka's coin designs is their recall of the designs used by Wima Kadphises; perhaps because his name seems to be a diminutive form of Wima (see §E.4 below), he sought to emphasise the connection. As with Wima Kadphises and Kanishka I, the designs show the king's authority through Iranian dress, religious imagery and kingly attributes. The king on elephant perhaps refers to the elephant as royal mount associated with the Indian deity Indra, also linked to the Indo-Greek representations of Zeus with elephant on coins of Antialcidas (MacDowall 2007a, 249). The king on mountain, holding club, refers to Oesho, the Kushan god of high places, linked with Greek Heracles and Indian Śiva (Cribb 1997a) and the king reclining on

throne, holding a cup, refers to Iranian gods in scenes of heaven, as often depicted in funerary banqueting scenes at Palmyra and in Parthian art. The 2nd-century AD relief at Tang-i Sarvak shows three Iranian gods holding cups: Mithra (identified by his rayed halo) and another unidentified god seated together on one throne, facing another unidentified god who lounges on a larger throne holding a cup in his left hand and offering a diadem with his right (Ghirshman 1962, 54). The Palmyra scenes are often described as funerary banquets (*ibid*., 70, 78), but it seems more likely that the scene shows the deceased in heaven feasting like the gods.

The three obverse designs on the copper coins and the two scenes on the gold coins of the king emerging from a mountain or seated on a mountain, where the king often has a halo and flames emanating from his shoulders, are all intended to articulate the king's authority by showing him as a semi-divine figure. Part of the intention was to echo the coin designs of Wima Kadphises, but part of it was also to show the king's semi-divine nature in an Indian, Kushan and Iranian context.

E.4 Huvishka: forms of name and titles

On his coins Huvishka's name, written in Bactrian, is consistent, but like Kanishka has various inflections: OOHÞKI (on most gold coins), OOHÞKO (on the first coins of the subsidiary gold mint, E.G2-i and all coins of the Kashmir copper mint, E.C3), and OOHÞKE on most copper coins (but often blundered). The -O inflection indicates the nominative case, but the -I and -E are oblique inflections, indicating the possessive case. The only Gandhari inscription to name Huvishka spells his name *hoveṣka* (Skinner 78). In Epigraphical Hybrid Sanskrit inscriptions his name is spelt *huviṣka* (Skinner 44, 45, 50, 51, 55, 56, 57, 60, 62, 65, 71, 82 and 231), *huveṣka* (Skinner 49, 54, 58, 73, 75 and 77) or *hūveṣka* (Skinner 59, 66 and 96) and there are a few with similar spellings but the values of the vowels are not visible (Skinner 46, 52, 63, 64 and 85). On two examples the consonant cluster is reversed, so the spelling is *huveksha* (Skinner 70 and 84), a not unexpected metathesis. A third with the same reversal but missing the middle syllable: *huksha* (Skinner 53) is perhaps a scribal error.

The Indian renditions of the initial Bactrian OOH as Gandhari *hove* and Epigraphical Hybrid Sanskrit *huvi*, *huve* or *hūve* can be compared with the versions of the same syllable in the name Wima Takto as Gandhari *vi*, *ve*, *vha* or *gra/gva* or Epigraphical Hybrid Sanskrit *ve*, and in Wima Kadphises as Gandhari *uvi*, *bi* (or *vi*) or *v'i* (pronounced *wi*). It is clear that the Bactrian OOH was unlikely to be pronounced as *vi* or *ve*, but closer to the sound *wi* or *we*, not represented by any Indian syllable. The common rendition of OOHMO as Vima is not as close to the original as the form Wima used here. The form Huvishka has become standard in academic work and is retained here. A rendering closer to Wishka would better reflect the probable pronunciation but there is little sense in creating novel labels for ancient kings in order to chase authenticity of orthography.

As was the case under Kanishka I, the mints under Huvishka add the name KOÞANO to the end of his own name on virtually all his coins. It is not used, however, in any of the inscriptions using his name in the dating formulae, almost all of which are private rather than official.

The titles used by Huvishka follow the same pattern as those of his predecessor Kanishka I, with the imperial title ÞAONANO ÞAO on most of his coins, but on his Kashmir issues (E.C3) all titles are omitted. In inscriptions he also has the same Indian titles as his predecessor *maharaja rajatiraja devaputra*, but not all of them are used in every inscription. In one case he is given the title *ṣāhi* (Skinner 50), as used in one inscription by both Wima Takto and Kanishka I, and becoming commoner in the inscriptions naming Huvishka's successors. In two inscriptions he is named without any titles (Skinner 54 and 55).

Huvishka's name has been read by some in the Ayrtam inscription (Turgunov *et al.* 1981; Harmatta 1994b, 432–3), but the reading is not to be given credence (Sims-Williams pers. comm.).

E.5 Huvishka: religious connections and imagery

Like Kanishka I there are several pieces of evidence which link Huvishka with Buddhism. In two Buddhist dedications (year 28: Skinner 50; Falk 2015a, 121–2; year 51: Skinner 78; CKI 159) his well-being is included in the merits to be obtained by the donation. A Mathura Epigraphical Hybrid Sanskrit inscription (Skinner 96) from the reign of Vasudeva I (year 77 = *c.* AD 203) mentions a monastery dedicated to him (*mahārājasya rājātirājasya devapūtrasya hūv*[*i*]*ṣkasya v*[*i*]*hāre*), and another inscription from the same region dated in Huvishka's reign refers to the king's monastery (*mahārāja devapūtra vihāre*), which appears to be the same monastery located at Jamalpur. Its dedication to the king suggests his involvement in its establishment. In the *Rājataraṅgiṇī* he is one of the Kushan kings, Huṣka, credited with the establishment of Buddhist institutions (1.168–73 and 8.3412: Stein 1900, vol. 1, 30–1 and vol. 2, 268). His name also appears in a Buddhist narrative as a follower of Mahayana Buddhism (Salomon 2002a).

The publication of a coin of Huvishka with an image of the Buddha (Handa 2005–6) has already entered the literature as evidence (Ray 2007, 118), but must be condemned as a modern forgery, made from a poor copy of Kanishka I's gold Buddha dinar (D.G1-iii, reverse die 8a) and an equally poor copy of the obverse of a dinar of Huvishka (E.G2-iv, obverse 1A, the die with the flaw at the top of the king's club).

Huvishka's lost portrait sculpture at Mat positions him well within the framework of Kushan royal cult, focused on the Iranian gods who were seen as bestowing kingship on his predecessors, as articulated in the Rabatak inscription. The continuity of the cult into his reign is witnessed by the Surkh Kotal inscription. The similarity of the religious affinities expressed on his coins to that of Kanishka I also affirms this.

The religious imagery on his coins shows Huvishka in a similar position to his predecessors as a participant in the Kushan royal cult. Although a larger set of gods appear on his coins, the selection process is the same, choosing gods in the Iranian pantheon, and their Greek and Indian parallels, to show his source of authority coming from these gods by demonstrating his personal relationship with them, through

Mint	E.C1			E.C2							E.C3	E.C4	
	Begram (main copper mint)			Gandhara							Kashmir	Mathura	
Phase/Reverses	i	ii	iii	i	ii	Iiia	iiib	iiic	iv	v	i	i	ii
Mao	X	X				X	x				X	X	x
Miiro	X	X				X	x					X	X
Oesho	X	y	X		x		y				y	X	y
Athsho	X						y			y			y
Nana	x			y	x		x				y		
Oado	y			y	x		X						
Ardochsho				y	x		X	X	X	X			y
Pharro					y		X	X					y
Heracles							X						
Vishnu				y									
bowman					x								

X = plentiful; x = scarce; y = very rare

Table 2.7 Gods appearing on Huvishka's copper coins by mint and phase

the blessings and diadems they bestow on him (Cribb 2009, 514; Bracey 2012b; Grenet 2015).

As under Kanishka I there was a core set of gods who occupy the most prominent place on the coinage, in which Mao, Miiro, Oesho, Nana, Ardochsho and Pharro feature most prominently. The set of divinities on the copper coins (**Table 2.7**) is smaller than that on the gold (**Table 2.8**), but the core group is similar.

At the main copper mint, the same set as had appeared on Kanishka I's coins were used, but with a gradually decreasing range of gods, so that at the end of his reign only Oesho was appearing on the coins. The same set or some of them appear at all the mints, but the Gandhara mint sets its own programme and introduces gods not appearing at the main copper mint. As the Kashmir mint ceased production early in the reign it reflects practice at the main mint, but only features three of the set. The Mathura mint was only operating in the second half of the reign and seems to have been most influenced by the Gandhara mint's practice during its early third phase, presumably when the Mathura mint began production.

The Gandhara mint's first two phases were all signed in Kharoshthi by the official Yodhavade and lack the usual labels for the gods. Most of the gods can be identified by the iconography they share with labelled gods from other mints, but two are unique to this mint: an eight-armed Vishnu-like deity and a bowman. It is tempting to identify the bowman as an early form of Rama, or as Śiva, although both are equally speculative, but even less plausible is Göbl's identification of this god as Heracles (1984, 165). Chattopadhyay's identification of him as Ganesha is based on his misreading of the name Yodhavade as Brahmi *gaṇeśa* (1967, 85).

The core set of gods on the gold coinage at the main gold mint is as limited as under Kanishka I, but with a slightly different set of gods, reflecting the addition of Ardochsho and Pharro late in Kanishka I's reign, and a gradual shift towards Ardochsho being the dominant design, probably finishing phase four with only Ardochsho's coins being struck. It seems likely that for most of the copper and gold coinages the deities continued to function as markers of the mint control system, but the number of exceptional issues is much greater than under Kanishka I. The extension of the coin pantheon, particularly in phase five at the main gold mint (E.G1-v) is difficult to explain. The additional gods, most of whom appear exclusively in this fifth phase only appear on a few dies, sometimes just one die. In many cases the reverse die seems to have only been used for a short period of time, which suggests that the increase in the number of divinities accompanied an increase in the number of batches the mint was producing and controlling. At the subsidiary gold mint the set of gods who appear commonly are the same as at the main mint, but a few new gods also appear among the rare types, again mostly from a single die and mostly from the end of the third and fourth phases, which represent issues of about the same time as phase five at the main mint.

Although there was an increase in the number of gods at both gold mints towards the end of the reign, in the final stage of production at the main gold mint and at both the main and Gandhara copper mints there was a closing down of variation, so they end up with a single deity: Ardochsho at the main gold mint and Gandhara copper mint, and Oesho at the main copper mint. This probably reflects a change in mint practice rather than a reduction in the Kushan pantheon, although the dominant position of Ardochsho and Oesho continues throughout the rest of the dynasty and represents a growing preference for them as the emblems of royal authority.

The choice of the gods to use for the common types shows a continuing focus of royal cult on Iranian gods, with the additional Greek and Indian deities easily accommodated into the Kushan pantheon to match its Iranian deities (Cribb 2008; Bracey 2012b). The two unnamed deities on the coins of the Gandhara mint (E.C2-i and -ii) appear to represent Indian iconography, but can perhaps be attached to the Kushan god Oesho.

The imagery and iconography of the deities on the coins is another study in itself and discussions can be found in Jongeward and Cribb (2015), Shenkar (2014), Grenet (2015) and Falk (2015b).

E.5.1 The purpose of the pantheon

As alluded to under Kanishka (§D.5) there has been much discussion of Kushan coins in terms of why particular gods were depicted on the coins. Many authors take the gods on coins as direct reflections of the king's personal religious belief, as evidence of Wima Kadphises' personal devotion to Śiva, or Kanishka's conversion to Buddhism. Others have suggested that the gods appease those who use them by employing a diverse mixture of gods worshipped within the empire. Another popular suggestion is that the gods were propaganda, intended to shape the understanding of others. Mann has suggested this last possibility in connection with Huvishka's use of a group of three gods:

> The selection of the devices, iconography, and deities for his coins was presumably not a trivial matter for these rulers or their mint masters; rather, it was more likely a carefully thought through process that hoped for specific messages to be delivered through the numismatic medium. As such the deities placed on these coins are not necessarily a reflection of popular beliefs or personal royal devotion; instead, they are a means to propagate royal agendas to Huviṣka's fellow elites both within his empire and beyond its borders (Mann 2014, 234).

Mann's account repeats a common misconception about numismatic iconography: that all of the agency in their design should be invested in the individual they acknowledge (Mann 2014, 229: 'gold coin patterns demonstrate a Kushana imperial agenda'), in other words that the king was invested in what went on the coin and was responsible for the designs with an active political purpose. There simply is very little evidence that most kings were personally involved in what appeared on their coins. In general coins are a very conservative medium, as they look like previous coins, to the extent that designs may remain fundamentally unaltered for centuries and the coins of particular regions can be seen as encompassing specific traditions as a result (Cribb 2003; 2007b; 2009). Even when coin design is relatively dynamic, as it was in the Kushan period, the general appearance, framing of the types, and symbols remain strongly fixed. Mann also repeated the unsubstantiated and implausible, but widely held, idea (Cribb 1985a, 78–9; 2009, 500–3) that the designs were a form of propaganda (Mann 2014, 234) intended by the king to impress upon his subjects and/or the international trading partners of the Kushan empire the nature of his kingship:

> I would suggest that it is not coincidental that many of the design choices on Huviṣka's coins would speak to elites in South Asia, Parthia, and Rome. They may well be designed to allow the Kuṣāṇa Emperors access to, or recognition in, a cosmopolitan political sphere that existed between these trading partners and, at times, political contestants (Mann 2014, 247).

There is little evidence from finds that Parthian or Roman elites had any regular access to Kushan coins. The Debra Damo and Rich hoards are the only confirmed finds from further west, the first of which was found in the territory of Axum (§F.6), not the Roman or Parthian empire. People in the contemporary Gangetic kingdoms, and most Gupta subjects in the 4th century, were familiar with Kushan coins, and the Guptas borrow heavily from Kushan design. However, it is doubtful most could read the Bactrian

Mint	**E.G1**						**E.G2**			
	main gold mint						**subsidiary gold mint**			
Phase/ Reverses	**i**	**ii**	**iii**	**iv**	**v**	**vi**	**i**	**ii**	**iii**	**iv**
Mao	X	X	X	X	X		X	X	X	X
Miiro	X	X	X	X	X	y		X	X	X
Oesho	X				y			X	X	X
Athsho					X					y
Nana	X	X	X		X	x	X	X	X	X
Ardochsho	X	X	X	X	X	X	X	X	X	X
Pharro		X	X	X	X	X	X		X	X
Maaseno etc.	x				y		x	y		
Manaobago		x	x							
Sarapis	y	y		x						
Heracles					y		y			
Dionysus					y					
Iamsho					y					
Lrooaspo					y					
Oanindo					X					
Ahuramazda					y					
Teiro					y					
Oxus					y				y	
Shaoreoro					x	X				x
Rishti						y			y	y
Oron									y	
Maiissoph										y
Ashaeichsho										y

X = many dies; x = 2 or 3 dies; y = 1 die

Table 2.8 Gods on Huvishka gold coins by mint and phase

labels for gods or understood the details of who these images represented. In fact it is clear from mislabellings at the mint that such a theological understanding could not be expected even amongst Kushan subjects and mint workers (Adrych *et al.* 2017, 116). These images likely did resonate with a wide range of people, but that was a result of the engravers borrowing an eclectic range of imagery to depict the gods, not an imperially directed attempt at propaganda.

In terms of size, general fabric, juxtaposition of king and deity, Kushan coins are similar to those which precede them. The labelled deities on gold coins resemble the layout of contemporary Roman gold coins, likely the only gold prototype the mints would be familiar with, and copper designs under Huvishka broadly reflect gold designs. All of this served a basic functional need: familiarity bred confidence in the coins' monetary worth and coins needed to look like coins.

At the same time coins depend for their monetary value on the authority of their issuer and so they feature symbols of that authority; the king with all his symbols (crown, diadem, weapons, goad, tamga) indicates the power which backs the coin as money. The gods who support the king are also featured to enhance the weight of the royal authority to issue coins (Cribb 2009, 505–6, 512–14). It is likely the mint is

simply reflecting existing iconographies, symbols and concepts of royal power (Kanishka and Wima Kadphises coin portraits are more likely based on sculptures like those at Mat than the other way round). Likewise the images of Buddha, Oesho and Mahasena seem to borrow elements from contemporary sculpture to create their iconography.

In some cases it is clear that the mint does originate designs. Zeymal (1997a) pointed out that many of the gods are simply standard types: female figure in long dress, male figure in princely costume, bearded male figure in robe, with attributes and labels added to identify them (Barbie Doll figures). Perhaps some of the gods lacked existing iconographies, so parallels with other divinities caused them to draw on existing imagery or to simply assign attributes to stock images. However, in general the mint reflects royal and divine authority; it is not trying to create it.

So if the coins are not propaganda or personal belief, and if they reflect existing symbols of power, why are certain gods used at certain times and not others? Unfortunately, the numismatic evidence is underdetermined and we simply do not know in most cases. It is often possible to say what was done but not why it was done.

For example, the evidence from worn dies, particularly the die labelled iii.1 recorded by Göbl (1984, pls 24–5) at Huvishka's subsidiary gold mint (E.G2-iii, obverse 1B), allows us to place the use of reverse dies and their divinities in a very precise order of issue. The same can be done at other points in both Kanishka I (Cribb 1998b) and Huvishka's reigns. Combined, they suggest that the mint rotated through the gods, in some cases keeping a die for later use, in others making a new die to continue production of coins with the same deity, sometimes altering the design slightly to distinguish it from previous issues. The rotation is never quite consistent but it makes clear that the mint used the images of gods as a control system, apparently to mark batches of production over time for purposes of monitoring the coinage (see Ch. 3 §D.4 and §E.3). In general terms no religious symbolism or event was marked by the issue of a particular god at a particular time. When the mint did break with this practice and issued a specific god out of its normal internal practice, as with the Buddha under Kanishka (see §D.5.1 above), this is usually very obvious. However, this does not tell us why, if there was a reason, a particular batch was marked with Oesho, or another with Ardochsho. Nor does it tell us why the mint expanded the range of gods so dramatically after the mid-reign crisis in the gold (E.G1-v), why the Gandharan copper mint issued gods not seen elsewhere (E.C2-i and E.C2-ii), or why the system of control through types disappeared from the late phases of Huvishka's coinage onwards. In most cases we cannot tell if those decisions were made by the mint or by the court.

This should not imply that nothing can be learnt from the coins. Amongst the proliferation of gods in the main mint's fifth phase is a die depicting Ahuramazda (E.G1-v, reverse 20a). The mint has used its generic bearded robed male figure (also used for Sarapis and Oxus) with the attribute of a staff (the garlanded diadem is the god's offer of support to the king not an attribute). That Ahuramazda is present at all, but that he appears only briefly, like Teiro or Rishti, demonstrates that the mint understood him to be only a minor part of the pantheon. It is unlikely that the mint's reflection of royal practice, even if they occasionally misunderstand a doctrine the mint staff did not participate in, would be seriously distorted on this point, and so these coins reflect a fundamental difference between the Kushan royal cult and Zoroastrianism as known from Iranian texts (Boyce and Grenet 2015).

E.6 Huvishka: contemporaries and international contacts

Apart from the envoys to Rome and India mentioned above, little is known about the direct relations between the Kushan state and its neighbours, near and far, in this period. There must surely have been contacts and perhaps conflicts with the Indo-Parthian rump state to the west, which lasted into the early 3rd century (Senior 2001, 178–90; see §A.6 above), the Western Satraps to the south, the Indian city kingdoms and tribal confederacies to the east, and the city states of Sogdia to the north, but no information survives. International trade links east and west must have continued through the reign, with movement across the Indian Ocean by Roman traders, as it is reported by the *Hou Han Shu* (88.12: Hill 2009, 26–7) that an envoy from Rome reaching the Han court in AD 166 brought elephant tusks, rhinoceros horns and turtle shells, almost certainly goods acquired by him in South Asia (Kolb and Speidel 2017, 36–8: McLaughlin 2014, 208–10). It is unclear at this period whether the Parthian kingdom in Iran had a border with the Kushans in the north-west, as the province centred around Merv was under local rule of an uncertain nature.

E.6.1 Yaudheyas

The Western Satrap ruler Rudradaman recorded, in his Junagadh inscription (Kielhorn 1905), that he had humbled the Yaudheya, which presumably was a reference to the state whose coins are known by that name today (**Fig. 2.45a–b**) (Allan 1936, cxlvii–cliii, 265–78; Handa 2007, 149–217). That claim is most important, not for the dubious boast of conquest, but because it demonstrates that in AD 150 (at the end of Kanishka's reign and beginning of Huvishka's) the Yaudheya existed as an independent political entity of sufficient import to make the boast worth making.

Yaudheya coinage falls into a class, with the Kuninda, Vrishni, Kota and others, which are generally referred to as 'tribal' or 'republican' based on assumptions about the nature of political authority within them. This has led in historiography to a sharp divide between these states and the 'imperial' powers of the Kushans, Western Satraps, Satavahanas and Guptas, according the 'tribal' or 'republican' states subordinate roles that allow them an independent existence only in the spaces between the large imperial formations (Singh 2013). As a result many historians have divided the Yaudheya-issued coins into two distinct groups: a pre-Kushan (1st century) and a post-Kushan issue (2nd century) (Ghosh 2012; Handa 2007, 153). Much of this depends upon confusions about Kushan chronology, assuming their rule was limited within the period AD 78 to 176. Kushan direct rule at cities like Mathura encompassed at least the period AD 100–254 (see §2, §B.6, §J.2).

Figure 2.45a–b Copper coins of the Yaudheya republic (located in modern Punjab and Harayana), 2nd to 3rd century AD, prominently depicting the god Skanda-Karttikeya and the goddess Shashti, identified in various sources as either his mother or his wife (BM 1922,0424.4731, 12.38g, 27.5mm, 1947,1201.297, 11.21g, 24mm).
In the Kushan period, after the reign of Huvishka, the design changes from a six-headed depiction of Skanda-Karttikeya in a style similar to pre-Kushan coinage in the Gangetic valley to a single headed depiction in a style similar to Kushan copper coinage

At some point the Yaudheya began to issue a type using the same form of flan and style as the Kushans. They replaced the six-headed Karttikeya type they had previously used with a single-headed image similar to the image of Mahasena on Huvishka's coins (E.G1-i, E.G2-i and -ii). Known as the Kārttikeya-Devasenā type (Handa 2007, 203–5) or Class VI (Allan 1936, 276–8), these coins diverge from Kushan practice in the symbols of authority they mobilise: both sides feature a god and the inscription refers to the political unit not a ruler (Dwivedi 2011). They generally weigh between 10 and 12g and are reportedly (Handa 2007, 160) overstruck on Huvishka and early Vasudeva I types. The weight would suggest that the Class VI coins were issued after the establishment of a new Kushan weight standard (E.C1-iii and E.C2-ii; Ch. 3 §E.7; this chapter §E.1) but before it dropped further under Vasudeva I, i.e. *c.* AD 160–90.

While this inception point for the Yaudheya Class VI coins makes sense there is some evidence that they continued to circulate for some time into the 3rd century alongside Kushan coins but without tracking the drop in Kushan weight standard. Coin moulds copying both Kushan and Yaudheya coins at Naurangabad, Rohtak and Sunet include impressions of Vasudeva (AD 190–230) and Kanishka II (230–46), and at least three hoards or parcels mixing Kushan and Yaudheya are known (CSH: nos 31, 103 and 104) of which that found at Theh Polar (CSH: no. 104; Srivastava 1934) features post-Vasudeva issues.

All of this suggests a continuity of Yaudheya rule in the Punjab, particularly around the centres of Naurangabad and Rohtak throughout the reign of Huvishka, and probably throughout the period that direct Kushan administration was exercised at Mathura, even if few details of the relationship between the two kingdoms survives.

F.1 Vasudeva I, c. AD 190–230: historical account

Very few events in the reign of Vasudeva I are recorded in written sources. One names him and the others can be associated with him by inference because they happened during the time of his reign. The source which names him is the Chinese *Sanguo Zhi* (History of the Three Kingdoms), copying from the lost *Wei Shu* chronicle of the Wei dynasty (AD 220–65, ruling northern China). The chronicle (*Wei Shu* 3.12: Zürcher 1968, 371) recorded the arrival of envoys from the Kushan king Botiao at the Wei court to present tribute in January AD 230, and that the Wei emperor bestowed the title 'Da Yuezhi king who loves Wei'. Botiao (波調 *bo-tiao*, Late Han *pai-deu*, Middle Chinese *pwâ-dieu*: Schuessler 2009, nos 18-16, 13-26) is missing the middle syllable of Vasudeva, *vāsudeva* in Epigraphical Hybrid Sanskrit inscriptions, BAZOΔHO in Bactrian on coins, but the date confirms his identity, as the only other Kushan king ruling about this time is Kanishka II. A further reference in the *Wei Shu* (13.1: Zürcher 1968, 371) includes the Kushans in a list of tribute-offering states.

The mission to China, setting out in AD 229, could relate to the threat to the Kushans posed by the newly formed Sasanian empire in Iran. Later historians record the impact on the Kushan empire of the new state. The Iranian historian

Figure 2.46 Silver drachm of Ardashir I, the first Sasanian king of Iran, AD 224–240, depicting the bust of the king on the obverse and a fire altar/throne on the reverse (BM 1918,0501.42, 25mm).
The coins of the Sasanians use distinctive crowns to distinguish each king and the principal denomination was the silver drachm

al-Tabari (Bosworth 1999, 15), writing in Arabic in the 10th century described eastern kings, including the Kushan king, offering submission to Ardashir I (AD 223–40) (**Fig. 2.46**), the founder of the new Iranian empire. The Armenian historian Moses Khorenats'i also describes the exploits of Ardashir against Khosrov (*c.* AD 216–63) the Armenian king and how he sent to the Kushans for their help, but the Kushans were obedient to Ardashir, so would not help (Thomson 2007, 213–14). This implies that the Kushan king had already submitted to Ardashir. Curiously, Moses' account says that the Kushans were related to Khosrov and that the Kushan empire was Khosrov's original homeland. Al-Tabari also mentions Ardashir I campaigning in the east and reaching Balkh (Bosworth 1999, 15), which was then the location of the main gold mint of the Kushan empire, so probably its northern capital. Although reported in these later sources, the numismatic evidence supports the scenario hinted at by al-Tabari and Moses, as the Kushan mint at Balkh seems to have started issuing imitations of coins of Vasudeva I from the end of his reign.

The numismatic evidence for the initiation of the imitation coins can be observed in the transition from the coins of Vasudeva I to those of Kanishka II at the subsidiary gold mint and the copper mint. Both mints went through a common set of changes: the early coins (F.G1-i and -ii, F.G2-i and -ii) were followed by designs featuring the addition of a trident over the small altar (F.G1-iii) and then by the introduction of the nandipada (F.G1-iv) at the main mint and of Brahmi control marks (F.G2-iv after a single die with a nandipada, obverse 1A) at the subsidiary mint. The rate of production of dies at both mints shows that when the transition to Kanishka II took place, the nandipada-marked issues of the main mint (F.G1-iv and -v; see Ch. 3 §F.3) continued as posthumous imitations beyond the end of the reign (**Table 2.9**). If the production of coins in the name of Vasudeva I continued at the main mint after it had ceased at the subsidiary mint, then it can be concluded that when the Sasanian authority took over the main gold mint, it issued coins in the name of Vasudeva I as imitations in order to maintain the currency system in a time of transition.

If we assume the pace of production at both mints was similar throughout the reign, with two workmen striking coins at the main mint and one at the subsidiary mint, then there were too many dies used at the main mint in comparison with those used at the subsidiary mint of its production, by about 59 dies (29 subsidiary dies would equate to 58 main mint dies but the data suggests 117 from phase one to four), suggesting that the end of Vasudeva's reign happened during phase four. If we use the annual production rate of coins under Huvishka as a guide, then the end of the reign could be as late as the end of phase five. This is, however, less likely, but perhaps increased military activity in the final years of the reign increase production at the main mint. The introduction of swastikas on the imitations of both Kanishka II (F-imit. G1-i) and Vasudeva I (F-imit. G1-ii) gold coins, corresponding with the introduction of swastikas on imitation copper coins (F-imit. C1-i) using the obverse design of Kanishka II with the reverse design of Vasudeva I, is the point at which one can be confident that the Balkh mint was no longer under the control of the Kushans and had been taken over by the Sasanian invaders. The gold swastika imitations continue through two more phases (F-imit. G1-iii and -iv) until replaced by gold dinars in the name of the third Kushano-Sasanian king Peroz I (T.G1-i).

The continuing currency of Kanishka II copper coins north of the Hindu Kush (Zeymal 1983, 251–6; Rtveladze and Pidaev 1981, 82–5) suggests that the Sasanian capture of Balkh did not bring the whole of Bactria/Tokharistan under their control, but the Kushans still held onto their eastern territory into the reign of Kanishka II. Coins of Vasishka have not been reported from north of the Hindu Kush.

F.2 Vasudeva I: problems of chronology

The dated inscriptions of Vasudeva I in the era founded by Kanishka I give a clear indication of the length of his reign. The earliest inscription read as 64 in most publications might in fact read 67 (Skinner 88; Shrava 127) or 68 (=AD 194; Falk and Sims-Williams 2017, 122). The latest inscription to mention him is in the year 98, and these place him between Huvishka and Kanishka II for approximately 40 years. The Chinese account of his envoy reaching China in AD 230, suggests that his reign lasted beyond the end of the first century of Kanishka I's era, so it is likely that dated inscriptions in the second century of the Kushan era may eventually be discovered, but none have so far been seen. AD 230 corresponds with year 4 of the second Kushan century and one of the inscriptions which has been attributed to Kanishka II dates to that year (Skinner 154; Shrava 17), so, if the attribution is correct, it is possible that Vasudeva I's reign ended soon after the envoy set out for China in AD 229.

An inscription with a dating formula mentioning Vasudeva (Skinner 127; Shrava 159) and attributed to year

	Main mint actual obv. dies	Main mint estimated obv. dies	Subsidiary mint actual obv. dies	Subsidiary mint estimated obv. dies
phase i and ii	10	11	8	10
phase iii	22	26	10	11
phase iv dies	36	80	7	8
phase v dotted dies	23	49		

Table 2.9 Number of dies known for the phases of production at Vasudeva's mints

170 by Mukherjee (1987) has now been reread as year 80 (Falk 2002–3, 41–4), placing it well within the reign of Vasudeva I, and removing it from the discourse about the era founded by Kanishka I.

An as yet unresolved problem concerning the inscriptions dated in the reign of Vasudeva I is whether any of them relate to Vasudeva II. Vasudeva I's reign, as demarcated by the inscriptions of Huvishka and Kanishka II, could perhaps have lasted from the year 60 of Kanishka I's era until the year 4 of its second century, whereas Vasudeva II's reign began about the same time as year 41 in the second century, the date of the Ara inscription of Kanishka III (Skinner 189; CKI 158; see §I.1) and must have lasted several decades, perhaps into the 70s or even 80s of the second century. Vasudeva II's date range as given in this publication is based on his reign having ended in the year 71, i.e. AD 297, but that dating is arbitrary and within the current evidence could be shifted as much as a decade. So there would be an overlap in year numbers between the two Vasudevas and theoretically he could be the Vasudeva mentioned in the dating formulae of the inscriptions attributed to Vasudeva I with years from 60–80. Only the first inscription of Vasudeva's reign falls in this range, that dated to year 64 (or 67 or 68 depending on reading) (Skinner 88). There is no indication of it being later than the other inscriptions of Vasudeva I but this means very little as the palaeography of Mathuran inscriptions does not change in a discernible way between the late reign of Huvishka and the Gupta period.

However, it seems unlikely that this or other inscriptions from Mathura mentioning the king should be attributed to Vasudeva II, principally because there are no definite inscriptions from India known after the private donation dated year 28 from Sanchi, which names Vasishka (Skinner 186; Shrava 62; Willis 1999–2000, 270). This would leave a gap of at least 36 years in which Mathuran inscriptions were dated, but it seems unlikely that by simple chance only those not using the king's name survived. More plausible, and the position assumed here, is that Mathura ceased to form part of the Kushan empire in the reign of Vasishka. So, many of the Mathuran inscriptions with dates in the 60s and 70s are probably from the reign of Vasudeva II but as Kushan rule no longer extended to Mathura he is not mentioned. The problem would warrant further investigation if new inscriptions appear, to confirm or reject the current view.

Confusion about the number of Kushan kings called Vasudeva has arisen through Göbl (1984, pl. 32, 52–4) attributing the coins of the late phases of Vasudeva I's issues (F.G1-iii and -iv, F.G2-iii and -iv) to a second king Vasudeva and Vasudeva II's coins to a Vasudeva III (pls 37–9), but he rectified this error to some extent in his catalogue of the Burns Collection (Göbl 1993a, pls 1–4, 13–16, 24). Most references to Vasudeva II or III in older literature refer to Vasudeva I, and Vasudeva II is generally known as Vasu if mentioned at all.

F.3 Vasudeva I: royal images

Until recently the only images of Vasudeva I were on coins, but the discovery of a Buddhist sacred receptacle (probably a reliquary), described as a silver pyxis by its publishers (Falk and Sims-Williams 2017, fig. 3) with what seems to be his image, revealed a different representation of this king, or of his later namesake (§J.3). The king, labelled with his name and titles (ϸαονανοϸαο βοζδηο κοϸανο), is shown standing beside a Buddha image (seated in meditation), holding out a censer in his right hand towards the Buddha. He stands frontally with his haloed head turned to his right to face the Buddha, wearing the same Iranian costume as his predecessors, tunic and leggings (with circular buckles), with an overcoat (kaftan) on top and a cloak over his shoulders. The overcoat is held by a double-buttoned clasp and three dots mark the end of his cloak. His left hand holds the hilt of his sword, which is under his overcoat (the tip of the scabbard can be seen projecting below its hem). He has a moustache and his hair is cut to just below his ear, but tucked behind, with two longer strands hanging down over his shoulder (as on Wima Kadphises' coins). He wears a tall headdress with a triangular outline, with two large diadem ribbons knotted behind, and decorated on the brim and front with dashes and an ornament on the front of the brim and on the side above the brim. There is a circular crest or ball on top of the headdress and a dashed trim down the back. The king's head is surrounded by a halo. In his right hand he holds out a pot towards the Buddha. He holds the pot using tongs or a long handle because the pot is hot, as is demonstrated by the smoke rising from its mouth. The pot is presumably a censer for offering incense.

One cannot, however, rule out the possibility that the image on the pyxis represents Vasudeva II (see §J.3). On most of his coins Vasudeva II is shown wearing the same outfit as on the pyxis, but in a more stylised form. The attribution of the pyxis to the reign of Vasudeva I seems to be based on the close similarity in style of the image to that appearing on the coins of Kanishka II, Vasudeva I's immediate successor, and Falk's rejection of the existence of Vasudeva II (Falk 2015a, 127; Falk and Sims-Williams 2017, 122–4). Falk argued that the coins inscribed with the name BAZOΔHO in Bactrian and/or *vasu* in Brahmi, attributed here to Vasudeva II (J.G1 and 2), were only using this inscription in imitation of earlier coins. He cites the 'degenerated gold coins with atrocious legends that mention Vasudeva' as further evidence (Falk and Sims-Williams 2017, 123), but the coins attributed here to Vasudeva II are not part

Figure 2.47 Relief depicting a donor from the Buddhist stupa of Kafir-Kot, Dera Ismael Khan District, in Gandhara (BM 1899,0609.2, schist, 191mm x 120mm), dressed in heavy overcoat over belted tunic and leggings, typical of the Kushan period.
This Iranian-style costume occurs frequently in the Gandhara and Mathura in the Kushan period and is similar to that worn by Kushan kings and gods on coins from the reign of Wima Kadphises onwards

of the series to which he refers. The coins he refers to are the imitations of Kushan coins made at Balkh by the Kushano-Sasanian invaders (F-imit. G1), and sometimes associated with Göbl's erroneous sub-division of the coinage between two homonymous kings (Göbl 1984, 74–5).

On the silver pyxis the king is accompanied in his worship of the Buddha by three other figures wearing tunic and leggings and two with sword hilt in their left hand, but none with a halo. One, opposite the king, with the name Narkas and the title Karalrang (ναρκασο καραλραγγο), has his hair cut below and over his ear, and a crescent emerging from his shoulders like the karalrang on the coins of Huvishka (E.C2-iii, reverses 4h, i and j). Behind him hangs a large ribbon (Falk and Sims-Williams 2017, fig. 1) and he wears a rounded high hat with a fringed border and with a tamga on the side, the same barred and Λ-shaped legs as on Huvishka coins, but with three prongs above and curved appendages on the bar and leg ends. The other two face each other on either side of a second identical Buddha. The figure on the left (*ibid.*, fig. 5, with the name Ram and the title Hostig (ραμο ι ωστειγο), has his hair cut below and behind his ear, and wears a lower headdress with a brim and ornament on the front. The figure on the right (*ibid.*, fig. 7), with the name Humyug-āgad (ομοιογοαγαδο), has the same hair, but no headdress or sword. The royal image on the silver pyxis is also comparable with images in Buddhist stone reliefs from Gandhara and Mathura where Kushan royal dress is worn by donors (**Fig. 2.47**), but the images are not labelled (Rosenfield 1967, pls 22, 29, 37, 38, 77, 93, 94).

In contrast, all of Vasudeva I's coin images show him wearing armour. The king is shown in the same pose as Kanishka I, with a trident or spear in his raised left hand and making an offering at a small altar with his right. The armour has a knee-length skirt over leggings with a tall helmet, the same shape as the tall pointed headdress with cheek-piece on late Huvishka coins. The armour appears to have rounded plates on the chest with a central decorative panel on some late coins from the subsidiary mint (F.G2-iv), with a heavy collar and rectangular plates on the skirt, drawn as crossing lines on early coins (e.g. F.G1-i) or as oblong blocks on later coins (e.g. F.G1-ii, -iii, -iv). The arms seem to be covered in overlapping rings and the legs have leggings with barred greaves over the shins. A heavy sword is hung from a belt round the waist with a lower strap supporting the sword across the upper thigh. The helmet and cheek-piece are covered in dots, either decorative or protective, and have a large circular ornament on the side and a crescent-shaped motif at the front, with diadem ribbons tied behind. On all dies, except late ones at the subsidiary mint (F.G2-iii and -iv), the helmet has a cheek-piece. On the dies without the cheek-piece the king's hair hangs from below the helmet, covering his ear in two or three strands, as on the silver pyxis. Wima Kadphises is also depicted on his coins with the same strands of hair (see §C.3).

One feature of the armour which seems to have been used to distinguish the products of the two gold mints is a banner attached to the back of the king's collar at the main mint, which is absent at the subsidiary mint. On one die at the main gold mint there is a small pennant attached to the top of the staff of the banner and on the top of the helmet (F.G1-ii, obverse 1A). The representations of the king on his copper coins also show Vasudeva I in armour, but without this banner.

There are some similarities to the armour worn by the riders and foot soldiers depicted on the Orlat bone plate (Pugachenkova 1991, pl. 245; Litvinsky 2001, 145), but the helmet and collar are of a different shape. One of the riders has a banner attached to the back of his collar, of a different shape, but in the same position as on the coin images. Plate armour has also been observed on a coin type of Kujula Kadphises (A.C5-i), as discussed above, while one of the riders in the Khalchayan sanctuary relief also wears plate armour, and one of the figures, dressed in the same attire as Kujula Kadphises on his 'Heraus' coins, holds a suit of such armour by his side (Pugachenkova 1971, 71). Plate armour is also seen in Iranian art (Mielczarek 1993; Ghirshman 1962, figs 63 and 122), but without the same details. Such plate armour with neck banner can also be seen on Indo-Scythian coins from Gandhara and the neighbouring areas in northern Pakistan, where the mounted (Senior 2001, type 50 and *passim*) or walking (*ibid.*, type 73) king has a plate-mail

knee-length skirt, with a banner attached to his collar. As his predecessors, Vasudeva I is often shown with flames emanating from his shoulders and with a halo round his head. The pyxis image confirms the royal status of wearing the halo.

There are Gandharan stone images showing royal worshippers of the Buddha which also show features that can be associated with Vasudeva I or one of his successors. One shows a figure in Kushan-style belted tunic and leggings wearing the same tall headdress with ball finial on top as Vasudeva I and his successors standing in attendance on a meditating Bodhisattva (Rosenfield 1967, 240, pl. 77). The headdress has diadem ties behind suggesting that the figure is royal. This piece is now in the Lahore Museum, so probably found at a Buddhist site in Gandhara. Another representation of a Kushan royal figure, wearing similar apparel and headdress and attending on a standing Buddha, has been discussed by Grenet (Marshak and Grenet 2006, 957, fig. 7), who thinks it may represent Huvishka. Two similar but damaged pieces from Hadda show a figure in Kushan royal dress in a Buddhist context (Rosenfield 1967, pls 93 and 94). In both cases the royal figure has his left hand covered in the same way as the king on Wima Kadphises' gold enthroned king coin type (C.G1-iv, obverse 4A), the Kanishka I casket (see §D.3 above) and on the coins of Kanishka I's first phase at his Kashmir copper mint (D.C3-i, 1/4u).

F.4 Vasudeva I: forms of name and titles

The Bactrian form of Vasudeva I's name is BAZOΔHO on most of his coins, but on the coins of the subsidiary gold mint a missing letter created a different form BAZΔHO (F.G2), which could have originally arisen as an engraver's error. The first die at the subsidiary mint is correctly spelt (F.G2-i), but in the following phase (F.G2-ii) mistakes occurred: BAZXHO (obverse 1A), AAZOΔHO (obverse 1B) and BAZΔHO (obverse 1B and 1E), but one die was spelt correctly (obverse 1D). The engraver of one of the misspelt dies (obverse 1E continued work in the next phase (F.G2-iii) and his mistake BAZΔHO continued until the end of the reign at the subsidiary mint. The transcription into Bactrian BAZOΔHO from Sanskrit/Prakrit *vāsudeva* is as one would expect. However, the missing omicron could have been caused by a weakening of the vowel in the middle syllable and it was this which gave rise to the loss of the middle syllable in the Chinese transcription Botiao as discussed above (§F.1). The inscription on the silver pyxis which spells his name BOZΔHO also supports the view that it is not an error, but an alternative spelling (Falk and Sims-Williams 2017).

In the date formulae in inscriptions Vasudeva's name was rendered as *vasudeva* in Gandhari (Skinner 137) and as *vāsudeva* (Skinner 88, 94, 128, 131, 133 and 151) or *vvāsudeva* (Skinner 127 and 141) in Epigraphical Hybrid Sanskrit. The doubling of the initial consonant might be a function of Sanskrit sandhi (Skinner pers. comm.; see also Lüders 1961, 126).

There are no official inscriptions known of Vasudeva I apart from his coins which use the standard imperial formula in Bactrian ÞAONANO ÞAO, as established under Kanishka I. On the silver pyxis bearing his image, he is also labelled with the standard Bactrian imperial title ÞAONANO ÞAO as on his coins. In dating formulae he was also referred to in the same way as Kanishka I (Shrava 1993, 103–26; Rosenfield 1967, 269–70), with the royal or imperial titles and *devaputra*. He has the additional title *ṣāhi* in a few cases (Skinner 127, 133 and 141). One inscription towards the end of his reign, year 98, however, introduced, in place of the normal titles, a new royal title *rājñā* (king), which had already been used in royal inscriptions by the Satavahana and Mathura kings since the 1st century BC (Rapson 1908, cxc, 1; Allan 1936, 174–82) and by the Western Satraps since the 1st century AD (Jha and Rajgor 1992, 85).

F.5 Vasudeva I: religious connections and imagery

The newly discovered silver pyxis places Vasudeva I and his courtiers in a clearly Buddhist context (but may apply to Vasudeva II, see §F.3 and §J.5). The pyxis was presumably the donation of one of the officials depicted rather than the king but whether they were acting in their capacity as agents of the state is less clear. Buddhist prayers on behalf of Vasudeva I certainly followed the pattern related to his predecessors as the Gandhari inscription on a stone slab from Ranigat, Buner, shows (Skinner 137).

Curiously his name places Vasudeva I in a clearly Indian Brahmanic context, as he is named after the Indian deity Vasudeva Krishna. That this association was understood is confirmed by the depiction of a four-armed version of Krishna, labelled in Bactrian BAZOΔHO on a coin issued at his main gold mint as the first issue of his reign (F.G1-i, reverse 1a). The god is shown holding a *cakra* and conch, the key attributes of Vasudeva Krishna in Kushan period sculpture (Härtel 1987), but also holds a club, the attribute of his brother Balarama, and a purse. At the same time the main mint also issued coins from the same obverse die with the Kushan goddess Nana on the reverse (reverse 2a). The main gold mint normally had two obverse dies in operation at the same time and the reverse die used with the other initial obverse die depicted the Kushan god Oesho. The juxtaposition of Nana with Vasudeva Krishna suggests that in line with earlier practice an Indian deity was being used to represent a Kushan god. The most likely candidate for this association is Oesho, as like Heracles, the Greek god with whom Oesho was linked, this image of Vasudeva holds a club. The intention in this choice of name is unclear but the Kushan dynasty had ruled parts of India for nearly a century when Vasudeva I came to power, so had probably assimilated a great deal of their Indian subjects' culture. Likely they linked Vasudeva Krishna with their own god Oesho, so that when Vasudeva I's coinage began the pairing of Vasudeva and Nana it was as a new version of the pairing of Oesho and Nana, which had been seen on the coins of Huvishka (E.G1-ii, reverse 4c; cf. E.G2-ii, reverse 5d). After the first obverse die the coinage reverted to depicting Oesho, in his own name and with his own iconography. After this initial issue only Oesho was depicted on Vasudeva I's coins. The connection between Oesho and Vasudeva Krishna is made even more apparent in coins of Huvishka's main gold mint phase v, where there are some dies on which Oesho is shown holding Vasudeva Krishna's *cakra* (wheel) (E.G1-v, reverses 5d and 5e). On one (5e), Oesho also holds a club,

which could be a reference to Heracles who was also associated with Oesho (Cribb 1997a, 34–7).

The imagery of Oesho on Vasudeva I's coins took on various forms, some emphasising the Śiva-like attributes (ithyphallic, water pot, bull mount, lotus flower, multi-headed, multi-armed, dancing), while all depicted his Kushan attributes (trident, diadem), and towards the end of the reign all showed him with a fiery halo. Some of the variations seem to be the result of the employment of a skilled and creative engraver at the subsidiary gold mint (F. G2-iii), while others could represent part of the control system, replacing the system with multiple gods under Kanishka I and Huvishka.

Although only one deity was used on his coins throughout most of his reign, it is unlikely that this represented a change in religious belief or cult, but simply a change in mint practice or the court's instructions to the mint, as the reduction in the number of gods depicted had already begun towards the end of Huvishka's reign. The suggestion by Mukherjee (1988, 389) that the emphases on Wima Kadphises and Vasudeva I's coins indicate a more sectarian attitude by these two kings (see also Zeymal 1997a) in contrast with a more tolerant attitude by Kanishka I and Huvishka is hard to support with the available evidence. As already argued, the gods' role on the coins was functional and often driven by mint procedure. While the king or court probably played a role in indicating which gods could be used, none of the surviving evidence gives any insight into their decision-making. Oesho is part of the full Kushan pantheon and the choice to depict just him, rather than the full pantheon, does not indicate any shift in the nature of Kushan royal cult. The same can be said of Zeymal's assertion of an ideological struggle within Shaivism between tolerant and strict versions of that cult (Zeymal 1997a, 255–61). Göbl also made the inappropriate suggestion that Vasudeva I was a stricter Shaivite than Wima Kadphises: 'Vasudeva I ist strenger Śivait wie Vima Kadphises' (Göbl 1984, 72).

The Kushan authorities show some interesting trends in coin design which are more suggestive of the causality of the decision-making which led to the design choices at Vasudeva I's mints. His choice of obverse is clearly a reference back to Kanishka I's version of Wima Kadphises' copper obverse type. Initially the design resembles that of Kanishka I, but differentiated by the costume worn by the king (armour replacing the overcoat over tunic and leggings), but in phase iii the trident feature over the altar from Wima Kadphises' coins is introduced to mark a new phase in the coinage, then in phase iv another feature, the nandipada, is also borrowed from Wima Kadphises' coins to mark the start of that phase. It seems likely that, whereas Huvishka's reverse designs are based on Kanishka I's, under Vasudeva I, after an initial continuation of Huvishka's practice, the mint changed over to that of Wima Kadphises. The changing practice in coin design shows the development of a visual vocabulary of reference to earlier kings which gradually created a dynastic convention. Such self-referential elements in design are also useful in sending a message of dynastic, and thus monetary, continuity and therefore stability. From Vasudeva I onwards that visual vocabulary continued to refer back, but in a more conservative way. Without further evidence the coins cannot be used to argue for tolerance, intolerance, Indianisation or any other interpretation, other than that the Kushan kings continued to adhere to the same pantheon of gods who reflected an Iranian pantheon and that they were the human mediators of the blessings of those gods to their subjects.

F.6 Vasudeva I: contemporaries and international contacts

The end of the reign of Vasudeva I marked a substantial shift in the international relations of the Kushan empire. The loss of Balkh and much of its territories north of the Hindu Kush forced the Kushans to acknowledge the supremacy of the new Sasanian empire in Iran. The trade routes with China could only now be accessed through the upper Indus and Kashmir passes into western Xinjiang, which must have severely restricted the movement of goods through Kushan territory from the Indian Ocean to China, and given advantage to the maritime route to China, bypassing Kushan territory.

In practice very little can be said about the events which led to Balkh changing hands and the same caution which was applied to the conquests of Kujula Kadphises and Wima Takto is warranted here. Did the loss of Balkh lead to the complete collapse of Kushan power in Bactria? Does the strong indication that it took place in the final year of Vasudeva's reign indicate he was killed? Was the campaign a singular event or did it lead to an extended period of conflict with Kanishka II? We do not know the answers to any of these questions, although the continuing currency of Kanishka II coppers north of the Hindu Kush does suggest the initial conquest of Balkh did not remove the whole of Bactria/Tokharistan from Kushan control and the conflict therefore continued through his reign (see §F.1 and §G.1). The only textual accounts which survive are a brief mention by the Iranian historian al-Tabari (5.820: Bosworth 1999, 15), the report of a mission to China (*Wei Shu* 3.12: Zürcher 1968, 371), and a confused reference to a Vehsachan by the Armenian historian Moses Khorenats'i (2.72: Thomson 2007, 219). The latter probably refers to Vasishka (§H.1). All the numismatic evidence can tell us is that the gold mint located at Balkh stopped making coins for the Kushans and started making them for a Sasanian-backed administration. It is clear from the slow, gradual, introduction of Sasanian practice into the mint that there was no sudden change of personnel at any level that actually impacted on the coins. Unfortunately, the coins are mute as to what happened outside the building they were made in, either in the oasis of Balkh or in Bactria/Tokharistan.

A find of Kushan gold coins at Debra Damo in Ethiopia (Göbl 1970; Whitfield 2018, 57–80) illustrates the reality of international trade from the Kushan empire across the Indian Ocean. The trade through the Red Sea was partly controlled from the kingdom based in the city of Axum (**Fig. 2.48**) in northern modern Ethiopia which traded through the port of Adulis (on the coast of modern Eritrea). The hoard is no longer locatable and is only known from a description of its contents: 5 double dinars of Wima Kadphises, 5 dinars of Kanishka I, 89 dinars of Huvishka and 6 dinars of Vasudeva I. From the information supplied

to him Göbl (1970) identified the latest coins in the hoard as the early issues of Vasudeva I's reign (F.G1-i), so the hoard was assembled in the AD 190s, and presumably reached Ethiopia soon after. The limited number of Vasudeva I's coins in the hoard also points to its assemblage early in his reign. Whitfield (2018, 70) suggests it may represent a diplomatic gift; certainly it is too large an amount for a casual loss by a merchant. It may equally represent a large mercantile payment, as later movements across the Indian Ocean from the mouth of the Indus to the Red Sea parallel those described in the *Periplus* (Casson 1989, §4), where Adulis is recognised as a port trading in African ivory brought from Axum.

Figure 2.48 Gold coin of Ousanas, king of Axum, in Ethiopia, *c.* AD 300–40, inscribed in Greek script and Ge'ez language (BM 1925,1112.1, 2.56g, 19mm).
The kingdom of Axum began issuing coins *c.* 270 AD, later than the latest Kushan coins, from early in the reign of Vasudeva I, *c.* AD 190–230, known to have been found in Ethiopia

G.1 Kanishka II, c. AD 230–46: historical account

The coins of Kanishka II position his reign between Vasudeva I and Vasishka at the beginning of the second sequence of dates associated with Kushan kings, roughly one hundred years after Kanishka I came to the throne (for a full discussion see §G.2 below).

The absence of gold coins made at the main Kushan mint in the name of Kanishka II suggests that Balkh was lost by the Kushans at the end of the previous reign, or immediately after if the unique gold dinar (G.G4-i) in the style of Vasudeva I's Balkh mint was issued there. Coins continued to be made in the name of Kanishka II at the subsidiary gold mint and at the main copper mint, suggesting that the territory south of the Hindu Kush was still held by the Kushans. Kanishka II's copper coins continued to circulate into Bactria, as is attested by the finds at Surkh Kotal (Fussman 1990, where they are misidentified as Vasudeva I issues), in Tajikistan (Zeymal 1983, 222–8, 251–6, where they are labelled Kanishka III) and Uzbekistan (Rtveladze and Pidaev 1981, 82–5, also labelled Kanishka III). It seems likely that the Sasanian capture of Balkh did not extend to all of the Kushan territory north of the Hindu Kush, so the supply of copper coins continued to flow from the main copper mint into eastern Bactria/Tokharistan. The production of copper imitations by the Kushano-Sasanian kingdom, based on the obverse of Kanishka II and reverses of Vasudeva I, did not begin until the supply of Kanishka II coppers began to fail.

There are no indications in the historical record of the relationship between the Kushano-Sasanian kingdom and the remnant Kushan state until further disruption of Kushan coinage production happened in the next reign. The submission mentioned above in relation to the end of Vasudeva I's reign does not show in any other kind of evidence.

G.2 Kanishka II: problems of chronology

It has been apparent since early numismatist studies that late coins demonstrated the existence of a king named Kanishka after Vasudeva I (Cunningham 1893a, 115). Despite this Kanishka II's nomenclature and chronology has been and continues to be a major problem in the literature. These problems relate to the two sequences of dates known from inscriptions naming Kushan kings, which Falk (2001a), following van Lohuizen-de Leeuw (1949), takes to be two centuries in the era of Kanishka, and Rosenfield (1967) took to be two eras separated by approximately a hundred years. For brevity, and because it makes very little difference in actual dates, centuries have been assumed in this publication.

The first problem in the literature is one of labelling. In some descriptions of Kushan coinage, Kanishka II is misidentified as Kanishka III (e.g. Rtveladze and Pidaev 1981, 82–5; Zeymal 1983, 251–6), because of the misattribution of Kanishka III's Ara inscription (Skinner 189; CKI 158) to the first Kushan century. Many scholars denied the existence of two separate sequences of dates (Shrava 1993), and this required that inscriptions of Vasishka and Kanishka III were read as referring to contemporaries of Kanishka I and Huvishka, and would thus make the Kanishka of the coins the third king of that name. Even scholars who proposed two sequences of dated inscriptions sometimes placed Kanishka III in the first sequence (Rosenfield 1967, 58), leading to the same conclusion. Zeymal (1967, 69–74) even sought to attribute to this anomalous Kanishka II the coins of Kanishka I's subsidiary copper mints (D.C2 and D.C3), in order to account for this misattribution. Even once the correct attribution of the Ara inscription, in the second sequence of dates, was known, the dispute over chronology led to this king sometimes being labelled Kanishka II/III. So while most Russian archaeological literature refers to 'Kanishka III' they are in fact attributing the coins to the king referred to here as Kanishka II.

The second problem is the coincidence at the same point in the first and second centuries of two kings called Kanishka. This continues to pose a problem in identifying which king is being named in which inscriptions. The most recent analysis (Skinner 2017) proposes that increasing levels of Sanskritisation are the best indicator for dating the inscriptions in the second Kushan century. Previous criteria used have included palaeography (van Lohuizen-de Leeuw 1949) and art historical criteria (Rosenfield 1967). Bracey (2011a) has shown that the palaeography of Brahmi inscriptions from Mathura suggests that Kanishka I and Kanishka II inscriptions can be distinguished by the shift early in the reign of Huvishka from a tripartite *ya* to a looped one in consonant clusters ending in *ya*. All examples of inscriptions with the name Kanishka attributed to Kanishka II by Skinner's criteria can also be attributed to him using Bracey's criteria (with the exception of the Sui Vihar copper

Skinner number	CKI	Year	Skinner criteria	Bracey criteria	Rosenfield's list	Title and name	
11				x			*kaṇiṣka*
13				x			*kaṇaṣka*
25		[10]4		x			*kāṇiṣka*
154		[10]4	x	x			*kaṇiṣka*
156		[10]5	x	x			*kaṇiṣka*
157		[10]5	x	x	x		*kaṇiṣka*
161		[10]7	x	x	x	*ṣāhi*	*kaṇiṣka*
28		[10]8		x		*ṣāhi*	*kaṇikkha*
31		[10]8		x			*kāṇiṣka*
163		[10]9	x	x	x		*kaṇiṣka*
165	148	[1]11	x	x	x		*kaṇiṣka*
166	147	[1]11	x	x			*kaniṣka*
33		[1]12		x			*kaṇiṣka*
168		[1]14	x	x	x		*kaṇiṣka*
34		[1]16		x			*kaṇiṣka*
171		[1]17	x	x	x	*ṣāhi*	*kaṇeṣka*
40		[1]20		x			*kaṇikṣa*

Table 2.10 Dated inscriptions naming Kanishka in their date formulae which can be attributed on different criteria to Kanishka II

plate which is written in Kharoshthi, not Brahmi), but Bracey's criteria add several more inscriptions to Kanishka II. Rosenfield's list (1967, 270–1) of inscriptions naming Kanishka, which he placed in the second sequence, also corresponds with Skinner's list (**Table 2.10**), except in some cases he attributed inscriptions to the first sequence which would be in the second sequence according to Skinner's criteria.

Rosenfield did not directly explain his criteria but they likely related to the representation of the Buddha at Mathura. In Mathuran art of this period there are two distinct styles of representation for images of the Buddha. The 'kapardin' style is named after the snail-shaped mound of hair on top of surviving heads. In this style the figure wears a robe only across the left side of their upper body, which is drawn tight revealing the contours of the chest, and then wrapped around the upper arm in a series of folds which are more or less stylised. It has been suggested that these images may in fact depict the Buddha before his enlightenment, as a Bodhisattva (Härtel 1985). The second style follows the style of Buddhas in Gandhara and is usually therefore known as the 'Gandharan' style (**Fig. 2.49**). These Buddhas wear a complete robe over the upper part of the body with stylised, symmetrical U-shaped folds falling down the centre in such a way as to conceal any anatomical features, and have hair composed of a series of curls.

The earliest datable images, those erected by the monk Bala and the nun Buddhamitra (§D.5.1), are kapardin types. In the 5th century Gupta-period images (**Fig. 2.50**) usually combine the curls of hair of the Gandharan types with the skin-tight fabric of the kapardin (Rosenfield 1963, figs 1–3; Mosteller 1991, figs 91–102). Later South Indian and Southeast Asian types are often depicted with the right shoulder bare (Kang 2013, 44), and a kapardin type found at Bodh Gaya is sometimes dated to the Gupta period (Rosenfield 1963, 22). In some cases kapardin and Gandhara-style features are depicted together in the same image (Vogel 1909, fig. 3; Bachhofer 1929, pl. 87). For this reason it seems plausible that the two styles were used alongside each other, based on taste and/or different iconographic meaning. This is the position taken in most publications on Mathuran art which rejected the idea of two sequences of dates (Sharma 1995). However, an alternative view is that the kapardin types were originally the only style produced at Mathura, and that in the reign of Huvishka (of those kapardin types with inscriptions most would date to the earlier part of the first century of Kanishka's era by the criteria already discussed) the Gandharan type displaced the kapardin type in the local workshops. On these criteria, Gandharan-type images with low numbers in their dates could not have been made in the reign of Kanishka I but must have been made in the reign of Kanishka II, or even later. Rosenfield (1967) does not articulate this view but it was likely the main factor in his decision to date some images to a second era.

Just as Skinner's argument for greater Sanskritisation connects with arguments about wider linguistic trends (Pollock 2006), so the criteria employed by Rosenfield (1967) connect with wider questions about artistic development. As such, the attribution of Kanishka II inscriptions has wide-reaching implications for the study of South Asian history in general and would justify a more in-depth re-examination of the inscriptions and sculptures. The political chronology offered in this publication is in broad outlines beyond contention, and so requires a substantial lengthening and reconsideration of the dating of Mathuran sculptures and inscriptions, contrasted with existing catalogues (Shrava 1993; Sharma 1995; Czuma and Morris 1985). The apparent agreement between the palaeographic, linguistic and artistic criteria in previous analysis (Rosenfield 1967; Bracey 2011a; Skinner 2017) suggests the likely results and forms the basis for all discussions in this publication, but a comprehensive and detailed re-examination remains desirable before drawing strong conclusions.

Figure 2.49 (above) Relief depicting an image of the Buddha in meditation within a gateway from Mathura (BM 1887,0717.54, sandstone, 140mm x 135mm).
The Buddha shows the impact of the 'Gandharan' style with heavy folds in the robes obscuring details of the body and hair represented as a series of curls. This manner of depiction seems to have been adopted at Mathura in the reign of Huvishka

Figure 2.50 (right) Sculpture of Buddha, making the gesture of reassurance, 5th century AD, from Sarnath, Varanasi District, U.P. (BM 1880.6, sandstone, 1440mm x 550mm).
Such later Buddha images combined elements of Gandharan Buddhist art, such as the hair, but with close fitting garments revealing the body underneath, typical of the earlier Mathuran Kapardin types

G.3 Kanishka II: royal images

The only images of Kanishka II which survive are on his coins. They take two forms: wearing the overcoat, tunic and leggings, and high headdress familiar on the coins of Wima Kadphises and Huvishka, or wearing armour with pointed helmet as on Vasudeva I's coins. He is always shown with a halo surrounding his head. In all varieties he is shown standing making an offering with his right hand at a small altar, surmounted by a trident, and holding a sceptre in his raised left hand. The sceptre has ball finials when the king is wearing the overcoat and a trident finial when wearing armour. The headdress and the helmet have the same form and are decorated with dots, and on most dies a circular device on the side, with diadem ribbons tied behind. Some dies show a crescent device on the front brim of the headdress, but not on the helmet. The overcoat is on all the coins of the main gold mint (G.G1) and on the coins of the copper mint (G.C1); the armour is worn on the coins of the subsidiary and the third gold mint (G.G2 and G.G3). Some issues of the subsidiary and third gold mints show the king with flames emanating from his right shoulder. The fourth gold mint's unique gold dinar (G.G4) shows the king in the same style and pose as Vasudeva I at his main gold mint (F.G1-v), but wearing an overcoat with tunic and leggings in place of armour.

G.4 Kanishka II: forms of name and titles

On his coins the name of Kanishka II is consistently spelt KANHÞKO in Bactrian. In Gandhari his name is spelt *kaniṣka* (Skinner 166; CKI 147) or *kaṇiṣka* (Skinner 165; CKI 148). In Epigraphical Hybrid Sanskrit there is still uncertainty about the initial vowel length *kāṇiṣka* (Skinner 25 and 31) or *kaṇiṣka* (Skinner 11, 33 and 34). There is also an apparent misspelling *kaṇaṣka* (Skinner 13) and a metathesis *kaṇikṣa* (Skinner 40). One Epigraphical Hybrid Sanskrit spelling seems to represent a different rendition of the name: *kaṇikkha* (Skinner 28), perhaps a variant in dialect akin to the Pali *bhikkhu* for Sanskrit *bhikṣu*. On the coins his name is followed by KOÞANO as on those of his predecessors since Kanishka I.

Kanishka II continued the standard Kushan practice since Kanishka I of using the Bactrian imperial title: ÞAONANO ÞAO on his coins, while *maharaja rajatiraja devaputra* was used in Gandhari and Epigraphical Hybrid Sanskrit inscriptions. In three of these inscriptions (Skinner 28, 161 and 171) the king has an additional title *ṣāhi*, the

Gandhari and Epigraphical Hybrid Sanskrit version of Bactrian ÞAO, as previously used for Wima Takto, Huvishka and Vasudeva I.

In the Zeda inscription (Skinner 165; CKI 148) the royal title takes an unusual form [*mu*]*r*[*o*]*ḍasa marzakasa*, which is difficult to interpret. The reading *muroḍa* is very uncertain as the stone has many scratches around the word. Falk (2010, 79–80) has suggested that it shows that the ruler named in the inscription is not a Kushan king, but a lower ranked official with the same name as the kings, with the title *muroḍa marzaka*.

The suggested title *muroḍa* has been linked with the name *muruṇḍa* in Samudragupta's Allahabad inscription (Fleet 1888, 8, 14; see §K–N.6), but the uncertainty of the reading in the Zeda inscription reduces the value of the association and raises the possibility that the suggested reading was directly influenced by knowledge of the Allahabad inscription.

A seal impression, depicting a man fighting a horse (Harle 1985), with a Bactrian inscription in the Ashmolean Museum seems to be from an official seal of a Kushan king called Kanishka (Bivar 1955; 1968, pl. 1, no. 8). It is inscribed with the name KANHÞKO and can be attributed to Kanishka II (or less likely III) because it has as part of its design a late Kushan version of the Kushan royal tamga. The inscription on the seal has been read by Sims-Williams as the name and titles of the king: μαυα κανηþκο ι ζαιαδο þαυρο διβο ποτρο ι χοιαχο υινδογανο þαυο, which he translated as 'Great Kanishka, the devaputra whose realm is ζαιαδο, the χοιαχο, king of the Indians' (Sims-Williams and Tucker 2005, 588). In his commentary he suggests that ζαιαδο could mean 'victorious' (*ibid*., 588) and that χοιαχο means 'elder' or 'greater' (*ibid*., 594), from this one can deduce that the inscription means something like: 'Great Kanishka, son of the gods, whose realm is victorious, the elder/greater, the king of the Indians'. The title 'king of the Indians' is new for a Kushan king, but echoes Kanishka I's claim to have subjected India to his rule (see §D.1). Perhaps the new title relates to the restriction of Kushan rule to the territory south of the Hindu Kush following the Kushano-Sasanian invasion.

Recently a sealing from a seal with the same man-fighting-horse design has been discovered in Pakistan (and pictured on social media, said to have been found in Mardan District). It shows the same design as the Ashmolean seal, but in addition to the Kushan tamga it has the Brahmi monogram *ṣaka*, as found on the gold coins of Shaka (see §K–N.4). The inscription includes what appears to be the imperial title [þαο]νανοþαο… and perhaps the name Kanishka, but it is not clear.

G.5 Kanishka II: religious connections and imagery

Kanishka II is shown on all his coins with halo and flaming shoulders, making an offering at an altar with the trident emblem of Oesho above. On most of his coins he is associated with Ardochsho, who offers him a diadem on the coins of the main gold (G.G1) and copper (G.C1) mints or a cornucopia or a lotus at the third gold mint (G.G3). At the subsidiary gold mint (G.G2) he is associated with Oesho who also offers a diadem. His quasi-divine attributes and act of offering and the reciprocal action of the gods from the Kushan pantheon show him continuing the Kushan royal cult, with the same deities as appear in a central role on the coins of his two predecessors.

The issue by Kanishka II of coins with both Ardochsho and Oesho is a pattern established for the next three Kushan kings who also use the same deities, using them to distinguish mints and gold coins from copper. This makes clear that there is no basis for the assertion made by Göbl that there were two distinct religious sects which represented two separate sets of kings:

> Sie teilt, wie wir sehen, die Könige en Śivaiten und *Ardoxšo*-Verehrer (Ardoxšiten) [They divide the kings, as we have seen, into Śivaites and *Ardoxšo* worshippers (Ardoxšites)] …
>
> Da wir aber gleich hernach die Trennung in eine śivaitische Reichshälfte mit dem Sitz in Kabul und eine ardoxšitische mit dem Sitz in Peshawar feststellen können, und weil ganz klar ersichtlich ist, daß diese Reichsspaltung einen eindeutigen religionspolitischen Hintergrund hat [So it is immediately clear that the empire has a separation into a Śivaite half with its base in Kabul and an Ardoxšite half with its base in Peshawar, and this splitting of the state has a religio-political background] (Göbl 1984, 70–1).

Each of the rulers of the Kushan dynasty until Shaka continued to issue coins with both Ardochsho and Oesho types, so Göbl's view is contradicted by the surviving coins.

The so-far unique gold dinar of Kanishka II's fourth gold mint (G.G4) presents a different deity on its reverse to those appearing on all other coins of his reign. The deity is identified by the Bactrian label NΩNEITO as the goddess Nana. She is labelled in this way on some coins of Huvishka (E.G2-iii and -iv, reverses 4f and 4j). Like one type of Huvishka (E.G2-iv, reverse 4l) she is also shown seated on the back of a lion. This image of the goddess shows features otherwise unseen for Nana on Kushan coins: she rests her feet in a tray of coins like Ardochsho, she holds a sceptre with a three-ball finial as held by the king on issues of (J.G1-iv) Vasudeva and his successors, and she has the horns of the crescent moon emerging from her shoulders, as worn by all images of Mao on the coins of Kanishka I and Huvishka. Although this coin is exceptional in many ways, the religious connections it represents are in keeping with earlier manifestations of this goddess on the coins of Kanishka I, Huvishka and Vasudeva I. Named as one of the most important deities of the Kushans in the Rabatak inscription, the coin shows that her role had not diminished by this time, but coin design had moved on and this type is out of step with developments since late in the reign of Huvishka.

G.6 Kanishka II: contemporaries and international contacts

The main focus of international relationships during this reign must have been the growing strength and territorial ambitions of the new Sasanian empire in Iran. The reign opened with territorial loss and the dynasty must have continued to come under pressure from the Sasanians as soon after the end of Kanishka II's reign yet more territory was lost. These events can be deduced from changes in the pattern of coin production and the limited references to the submission of the Kushan king in later sources. There is no

Figure 2.51 Silver drachm of the second Sasanian emperor Shapur I (AD 240–272) depicting the bust of the emperor on the obverse and a fire altar with attendants on the reverse (BM 1843,0620.5, 26mm). Shapur I is distinguished by his crenelated crown, associating him with the goddess Anahita, who derived it from her identification with the Greek goddess of good fortune Tyche

surviving evidence of connections with the Mediterranean, Indian states or China during this reign.

H.1 Vasishka, c. AD 246–67: historical account

There are two possible mentions of this king in textual sources. The first is the Kashmir chronicle *Rājataraṅgiṇī* (1.168–9 and 8.3412: Stein 1900, vol. 1, 31–2 and vol. 2, 268) which mentions a Kushan king alongside Kanishka and Huvishka called *juṣka* and this is thought to represent a shortened version of the name of Vasishka, because in the Kamra and Ara inscriptions his name is spelt *vazeṣka* (*vajheṣka*) in Gandhari. It has been suggested that the Kharoshthi consonant previously transcribed as *jhe* in the name of Vasishka would be more appropriately transcribed as *ze*, matching its form in Bactrian (Glass 2000, 110–12), so the Gandhari form should be *vazeṣka* and it is so transcribed by Skinner (188 and 189). The second is the Armenian historian Moses Khorenats'i (2.72: Thomson 2007, 219; Dodgeon and Lieu 1991, 315), who described the Armenian king Khosrov (*c.* AD 216–63) sending messengers to all his allies, including the Kushans, seeking assistance against the Sasanian king Ardashir I. One of the responses he got was from one of his kinsman Vehsachan who had not given obeisance to Ardashir.

It is suggested that Vehsachan is Vasudeva I because help was sought against Ardashir I who died in AD 240 and therefore in the reign of Vasudeva I or Kanishka II (Puri 1965, 58–9; Grenet in Falk 2015a, 129). However, in Moses' text this event is placed after Khosrov's attempt to get help from the Roman emperor Philip I (AD 244–9), so may relate to the period after Ardashir I's death. The historian is clearly confused and continued to refer to the activities of Ardashir I against Armenia down into the 280s. Chaumont dates the Sasanian conquest of Armenia by Shapur I (**Fig. 2.51**) in *c.* AD 252 or 253 because he was able to appoint his son Hormizd-Ardashir as king of Armenia (Chaumont 2011). If Moses is understood to be referring to the period between Khosrov's asking help of the Romans and his assassination a few years before the Sasanian conquest, then the reference to help being offered by Vehsachan could be dated at the beginning of the reign of Vasishka. Falk (2015a, 127–9) also dated the event to the same period, but attempted to link it with a king he calls Vaskushan, on the basis of an inscription with this name dated year 22, i.e. in AD 248/9. The problem of so-called Vaskushan will be discussed below (§H.2 and §J.1).

The coinage of Vasishka shows a change in its dies in the third phase at his main gold mint (H.G1-iii) which suggests that this gold mint which struck most of Kanishka II's coinage south of the Hindu Kush was subjected to a disruption of die production. This disruption could be a reflection of the claim *c.* AD 263 by the Sasanian emperor Shapur I (AD 240–70) to have control of Kushan territory as far as Pashkabur, i.e. Peshawar (line 3 *kwšnhštr H.N prhš OL pškbwr*, line 4 κουσην[ων εθ]ν[η] εως εμπροσθεν πασκιβουρων, Kaʿba-ye Zardošt inscription; Huyse 1999, 24, 36; Sprengling 1953, 14, 73). The inscription also talks of Shapur's empire reaching into India and Sogdia. If the main gold mint was located at Peshawar, then the disruption could be linked with this extension of Sasanian rule. Up to this point the main Kushan copper mint (H.C1-i) at Begram also continued in production, so its closure would also be linked with the Sasanian penetration south of the Hindu Kush and as far as Peshawar.

The Kushan empire under Vasishka might also be what is referred to as Bactrians in the life of the Roman emperor Valerian I (AD 253–60) as unwilling to cooperate with Shapur I (*Historia Augusta*, *Valeriani Duo*, 4: Magie and Ballou 1932, 3–7).

The context of the expansion of Sasanian conquest of the western part of the Kushan empire under Vasishka also has a visual form in the Rag-i Bibi relief, found in Afghanistan in 2002 (Grenet *et al.* 2007). In this relief a Sasanian horseman, accompanied by a standing figure dressed in the same outfit as the Kushan kings, overcoat over tunic and leggings, is shown hunting rhinoceros. Grenet and his collaborators identified the Sasanian horseman as most likely a representation of Shapur I, on the basis of the similarity of the horse trappings to those in Sasanian reliefs in Iran depicting this king (*ibid.*, 258). The reconstruction of Kushan and Kushano-Sasanian history outlined here makes Shapur I, Vasishka and the third Kushano-Sasanian king Peroz I contemporaries, so it is therefore as likely that the horseman is a representation of Peroz I and the Kushan figure standing by the horseman is a representation of Vasishka. The relief is symbolic of the Sasanian capture of Kushan territory as far as Peshawar before AD 263. The overstriking of Shapur I's coins by Peroz I's northern (T.C1-i) and southern (T.C2-ii) copper coins confirms these rulers' contemporaneity. A Peroz I copper coin (T.C2-ii) is also reported overstruck on a Kushano-Sasanian imitation of the coins of Kanishka II and Vasudeva I (F-imit.C1-ii) issued in the period of Vasishka.

H.2 Vasishka: problems of chronology

Earlier understandings of Kushan chronology created many problems in understanding the place of Vasishka in Kushan history. The existence of a Vasishka as co-ruler and successor of Kanishka I still persists in the literature (Chakravarti 2014, 47, 51–2; Agrawal 2014, 331–2). The identification of Vasishka's coins as issued between Kanishka II and both Kanishka III and Vasudeva II by Göbl (1965), and the dating of Kanishka I to AD 127 (Falk 2001a) resolved many of those problems.

One of the Epigraphical Hybrid Sanskrit inscriptions of Vasishka's reign has caused problems as it uses a very abbreviated version of his name: *vaskuṣāṇa* (Skinner 182). The coin record shows a direct transfer of power from Kanishka II to Vasishka, with complete overlap of control marks at the main gold mint (G.G1-i, obverse 1D/reverse 1b, to H.G-i, obverse 2A/reverse 1b) and subsidiary gold mint (G.G2-i, obverse 1C/reverse 1c, to H.G2-i, obverse 1A/reverse 1a). This rules out a separate ruler intervening, but it has been suggested that Vaskushana existed as a distinct ruler (Falk 2015a, 127–9). The inscription shows a deliberate writing of the name as *vaskuṣāṇa* with the *sk* consonant cluster. The inscription was written on a Buddha image at Sanchi, far from the Kushan administrative centres, so could represent a remote scribe misunderstanding or contracting the king's full name, Vasishka Kushan, as it appears on his coins and in the Kamra inscription (Skinner 188).

H.3 Vasishka: royal images

Images of Vasishka are only known from coins (unless he is the figure in Kushan royal costume on the Rag-i Bibi relief). He is shown in two different costumes, in both cases standing making an offering at a small altar, on his gold and copper coins. His costumes are the same as those appearing on the coins of Kanishka II, either in the overcoat, tunic and leggings with tall headdress, or in plate-mail armour with a tall helmet. As on the coins of Kanishka II, he holds a sceptre in his raised left hand, either with a ball finial when wearing overcoat etc. or with a trident finial when in armour. The two different depictions serve to differentiate the mints issuing coins during his reign.

H.4 Vasishka: forms of name and titles

Apart from the *vaskuṣāṇa* inscription mentioned above, Vasishka is spelt BAZHÞKO in Bactrian on his coins, *vvāsiṣka* or *vāsiṣka* in Epigraphical Hybrid Sanskrit inscriptions (Skinner 183, 186 and 187) or *vazeṣka* in Gandhari inscriptions (Skinner 188 and 189). The equivalence of Epigraphical Hybrid Sanskrit/Brahmi *s* with Bactrian Z is also seen in the name of Vasudeva I. Vasishka has the name Kushan following his own on his coins in Bactrian KOÞANO and in the Kamra inscription in Gandhari *guṣana* (Skinner 188).

Vasishka's name shows the same hypocoristic suffix as Kanishka and Huvishka, suggesting Vasishka is a diminutive form of Vasudeva, and that perhaps he was Vasudeva I's grandson.

Vasishka's coins, when they can be read, use the regular imperial titles in Bactrian ÞAONANO ÞAO. In dating formulae in Epigraphical Hybrid Sanskrit inscriptions he was referred to in the same way as his two predecessors (Skinner 183, 186 and 187; Shrava 59, 62 and 63; Rosenfield 1967, 272). A Gandhari/Kharoshthi inscription found at Kamra (near Attock in Pakistan; Dobbins 1975; Skinner 188; Shrava 183; CKI 230), which appears to have a dating formula of Vasishka, but also appears to have some official status, gives this king a long string of titles which are comparable with those used of Wima Takto and Kanishka I in their official inscriptions. In this inscription he has imperial titles *maharaja rajatiraja* and the familiar *devaputra* and is also titled *tratara* (saviour) and *jayata* (victorious), and other titles which are less easy to decipher, but are thought to read *de*[?]*vatasa*, or *de*[*bra*]*vadasa* and *svayaṃbala* (see §C.4). Like Kujula Kadphises, the founder of the dynasty, he is also given the title [*dha*]*mathida* (steadfast in the law). The style of writing and the damage to the inscription has prompted other less plausible readings, such as the application of the last two titles to his ancestor (Shrava 183).

The name of Vasishka is also thought to match the king Juṣka mentioned in the Kashmir chronicle *Rājataraṅgiṇī* (1.168–71: Stein 1900, vol. 1, introduction 76, text 30–1; vol. 2, 268). He is named alongside kings called Huṣka and Kaniṣka. If the sequence of the names in the text, Huṣka, Juṣka and Kaniṣka, is significant then Juṣka would be Vasudeva I and Kaniṣka would be Kanishka II, but the unhistorical nature of the early books of the *Rājataraṅgiṇī* makes any conclusions derived from it questionable. The suggestion that Juṣka is Vasishka is based on the fact that his name is the only Kushan royal name close enough to *juṣka* (Smith 1904, 237n).

H.5 Vasishka: religious connections and imagery

There is nothing in inscriptions datable to Vasishka's reign to give any indication of royal cult. His coin designs reflect the same limited view of adherence to Kushan royal cult through representations of Oesho and Ardochsho (**Fig. 2.52**) as on the coins of Kanishka II and Vasudeva. Two inscriptions on dedicated Buddhist images at Sanchi from his reign (Skinner 182 and 186) show the continuing practice of Buddhism and the importance of monastic centres in India during his reign, but they do not indicate the king's patronage of Buddhism. If Vasishka is the *juṣka* named in the *Rājataraṅgiṇī* (1.168–9 and 8.3412: Stein 1900, vol. 1, 30 and vol. 2, 268), then there was a tradition in Kashmir of his patronage of Buddhist institutions, as the founder of a city with his own name *juṣkapura* and its Buddhist monastery.

H.6 Vasishka: contemporaries and international contacts

Apart from the possibility of alliance with Armenia and conflict with Sasanian Iran, there are no other textual references to international relations of the Kushan empire under Vasishka.

The objects in the 'treasure' rooms found during the French excavations at Begram represent imports from India, China and the Roman empire. Recent reanalysis (Morris 2017) of the evidence of the archaeology of Begram suggests that the Sasanian conquest of Begram, *c.* AD 260, coincided with the closure after AD 260 of the so-called 'treasure

Figure 2.52 Clay impression from a coin, reportedly found in Gandhara at Sar Ḍherī, Mardan District, made by using the reverse of a coin of Vasishka, *c.* AD 246–67, possibly used to seal a document (BM 1960,0517.1.17, terracotta, 25mm x 24mm; Callieri 1997, S13).
The reason that coins were occasionally repurposed as seals remains unclear, but it illustrates how coins were often employed for purposes other than monetary exchange

Figure 2.53 Copper coin of the Kotas, with the Brahmi monogram *kota* on the obverse and a simplified version of Kushan depictions of Oesho on the reverse (BM 1983,0729.17, 5.89g, 19mm).
The apparent cracks in the surface resulted from the manufacturing process which involved cutting, flattening and folding existing coins

rooms', discovered in the excavations of the city (Hackin 1939; Foucher 1942; Hackin *et al.* 1954). The finds in these rooms included coins from the 2nd and 3rd century, but none of the coins issued in the region by the new Kushano-Sasanian administration south of the Hindu Kush, issued from *c.* AD 260 under Kushanshah Peroz I (*c.* AD 245–70) and his successors until the Sasanian emperor Shapur II's local issues (Morris 2017, 82–9).

The objects in the Begram rooms potentially illustrate the international trade conducted through the Kushan empire. It is also possible that, if they relate to the royal complexes in the city, the imports could represent the remnants of official exchanges between the Kushan court and its neighbours, but they might equally represent a more mundane depot. The replication of Roman motifs in Gandharan art better suggests the availability of imported Roman wares in the Kushan empire, at least among artists and their patrons. Most attempts to date the Begram treasures relate to dating the production of the found objects (Ball 2016, 153–4, 164), but, as Morris' research shows, they probably represent an accumulation assembled during the Kushan occupation of the city from the 1st to 3rd century.

H.6.1 The Kotas

In the mid-3rd century AD a series of coins began in the Punjab which are usually attributed to the Kota polity named amongst those conquered by Samudragupta in his Allahabad pillar inscription (Fleet 1888, 6 and 12, line 14) (**Fig. 2.53**). The attribution of the coins is based upon their obverse design which usually consists of a Brahmi monogram reading *kota* vertically. The use of a vertical Brahmi monogram also mirrors the use of such monograms on Kushan coins from the reign of Vasudeva II. On the reverse the coins feature a standing figure, one arm upraised, standing before a bull, undoubtedly a copy of the image of Oesho commonly found on Kushan coins.

The weight standard of these coins seems to begin a little over 5g and to drop gradually over time so that the last issues are just 2g. If the weight standard was a reliable guide then their issue would have started at about the time of Vasishka and would have continued until the arrival of Samudragupta in the area. This broadly corresponds with the finds of hoards, one in later layers of Sanghol (Ray 2010b), and another represented by the Nasik teaching parcel (CSH: no. 87) which seems to close out with Vasishka. Three Kota coins were also recovered, similarly in the Rupar hoard (Riches 1996; 1999). Riches also reports overstrikes on Kota coins, perhaps by other late 3rd-century coins (Riches 2000), and that they are found in worn condition with coins of Shapur II (Riches 2001; see also Cribb 1985c, 315–18). In some cases it seems the blanks of Kota coins were made by hammering older coins into flat sheets and then folding them over. Traces of this technique are apparent on many examples at the edges but only a few have been unfolded, those revealing early 3rd-century Kushan coins. Kumar (2014, 42) reports overstrikes on 'Hunnic' coins but does not substantiate this. As for negative evidence, though Kota coins are found in the region of Sunet and Rohtak, they are not usually reported amongst the types used for coin moulds at those sites, suggesting they are slightly later than the coins of Yaudheya Class VI, Vasudeva I and Kanishka II. All of this, though more circumstantial than ideal, suggests they were issued in the second half of the 3rd and first half of the 4th century.

In other sections it is suggested that large-scale re-use, particularly overstriking, will often reflect the seizure of a treasury or a mint, and therefore military conflict. This would fit with the general trend in post-independence historiography to posit an alliance between different 'indigenous' polities to drive the Kushans out of the upper Ganges and southern Punjab after the reign of Vasudeva. The Kotas are sometimes placed at the head of such an alliance, though the Yaudheya and Nagas are equally popular choices. This is certainly possible, as the last Mathuran inscription to name a Kushan king in its dating formula cites Vasishka (year 28 = AD 254: Skinner 186; Shrava 62) but some caution should be exercised. Copper coinage continued to flow south from the Kabul valley, Gandhara and Punjab into the Gangetic valley well into the 4th century as testified by hoards at Mathura of Shaka and Shapur II coins, and the Kotas may simply have been re-striking this imported coinage. In any case, judging by the relative abundance of their coinage it seems they established themselves as the Kushan empire's largest southern neighbour.

H.6.2 The Paratarajas

To the south-west of Kushan territory during this period there was a kingdom, called Pāradān, reported in contexts which also mentioned the Kushan kings or their Sasanian

Paratarajas known from coins	Son of	Dates AD (Tandon 2012, 34)	Bust (B)/ Standing king (S)	Metal: Silver (Ar)/ Copper (Ae)	Inscriptions: Brahmi (Br)/ Kharoshthi (Kh)	Other evidence	Contemporary Kushan ruler
Yolamira	Bagareva	125–50	B	Ar	Br	Inscription from Tor Dherai	Wima Kadphises (113–27)
							Kanishka (127–51)
Bagamira	Yolamira	150	B	Ar	Br		Huvishka (151–90)
Arjuna		150–65	B	Ar	Br		
Hvaramira		165–75	B	Ar	Br		
Mirahvara	Hvaramira	175–85	B	Ar	Br		
Miratakhma		185–200	B	Ar	Br		Vasudeva I (190–230)
Kozana	Bagavharna	200–20	B	Ar	Br/Kh		
Bhimarjuna	Yolatakhma	220–30	B	Billion	Kh		
Koziya	Kozana	230–65	B/S	Ae	Kh		Kanishka II (230–46)
							Vasishka (246–67)
Datarvharna	Datayola I	265–85	S	Ae	Kh		
Datayola II	Datarvharna	285–300	S	Ae	Kh	Overstrikes Hormizd I (270–300)	Vasudeva II (267–97)

Table 2.11 Sequence of the Paratarajas

opponents the Kushanshahs. The Kaʿba-ye Zardošt inscription of Shapur I, *c.* AD 263, lists Pāradān among his eastern possessions, just before 'Hindustan' and the 'Kushan kingdom as far as Peshawar' (Huyse 1999, 22–4; Tandon 2012, 28). According to the Paikuli inscription the Sasanian emperor Narseh (AD 293–302/3) received, among others, including a Kushanshah, a king of Pāradān (Skjærvø 1983, 52–3, §44/42; Tandon 2012, 28). This kingdom is also known from a Buddhist dedication, found at Tor Dherai near Loralai, which was made by one of its kings Yolamira (Konow 1929, 173–6, for context see Tandon 2012, 31). There are also possible references to Parata in Classical sources and in the *Hou Han Shu* and later Chinese sources (Tandon 2012, 36 and 40–1).

On the coins of this kingdom which have been studied over the last half century the name is usually spelt Parata (Mukherjee 1972; Tandon 2006; Tandon 2009a; Tandon 2010; Falk 2007). There are no accurately provenanced finds of the coins, but verbal reports suggest they were current in Baluchistan:

> These coins are reportedly found mostly in the area around the town of Loralai in north-east Balochistan, although some reports also indicate their appearance in Zhob, Quetta, Chaman, Kandahar and a vague 'desert area on the Pakistan-Iran border.' Although these kinds of unsubstantiated reports are less than the solid evidence we would like, the reports for the finds around Loralai, coming repeatedly from several independent sources, are very strong … (Tandon 2012, 27).

Like the Kushans the Paratarajas (see **Fig. 2.27**) employed the title *ṣahi* but their coin series initially owed nothing to the numismatic tradition of the Kushans. They issued small silver drachms in very modest numbers drawing on elements of Parthian and Western Satrap designs. The modest numbers have made it easy to identify the re-use of dies between reigns and as the coins name the father of each king a reconstruction of the order of the dynasty has been possible (**Table 2.11**). One element of Kushan coin design which does seem to impact the series is the image of the standing king which was likely borrowed from Kanishka II coins or their Kushanshah imitations, and was introduced as the silver coins become debased in the 3rd century (Tandon 2012, 36). The coins of the Paratarajas continue to pose challenges of interpretation, including why a silver coinage continued (or began) in this region after it had collapsed elsewhere in the reign of Kujula Kadphises, and why Kharoshthi inscriptions replaced Brahmi ones, when the reverse happened in most other regions.

There is also the open question of the relation between the Paratarajas and their imperial neighbours, the Sasanians and the Kushans. The expansion of Sasanian power at the expense of the Kushans in Bactria appears to have led to the administrative incorporation of quasi-independent cities like Merv, and previously independent, but possibly allied/culturally aligned, states like the remnant of the Indo-Parthian kingdom, both of which ceased to issue coins. However, if the tentative reconstruction of Parataraja chronology is correct, the Paratarajas adopted Kushan iconography in their coin design at about the same time as Kushan fortunes reached a low point, during which not just Balkh, but then all of Bactria/Tokharistan and Peshawar fell to the Sasanians and came under the rule of their subordinates the Kushanshahs (Tandon 2010, 21). It is important not to read too much into this; as argued extensively elsewhere in this publication, coins do not

straightforwardly record political decisions, and there are a wide variety of reasons for adopting a design, but it highlights the ambiguity of our sources.

I.1 Kanishka III, c. AD 267–72: historical account

Kanishka III is only known from his coins and two inscriptions. The Kamra (Skinner 188; CKI 230) and Ara (Skinner 189; CKI 158) inscriptions identify him as the son and successor of Vasishka. The Ara inscription is 11 years later than the Kamra inscription which refers to his birth, so he seems to have ascended the throne as a minor.

The numismatic evidence suggests that though Kanishka III succeeded Vasishka he was not acknowledged as successor by most of the mints. This is most clearly seen in the last coins of Vasishka's main gold mint phase iii (H.G1-iii, obverse 1B/reverse 1b) which were struck from dies engraved by the same artist as the first issues at the same mint under Vasudeva II (J.G1-i, obverse 1A/reverse 1a) showing complete continuity between reigns at the main mint. Kanishka III's gold coins were struck with dies engraved by a new artist and show no continuity from Vasishka's reign. Curiously his copper mint coins (I.C1-i) appear to have been engraved by the same artist as some of Vasishka's (H.C2-ii). The Kamra and Ara inscriptions are both from the region near Attock, suggesting that the territory Kanishka III managed to hold on to was in the same location. Kanishka III's reign was brief as Vasudeva II took over his gold and copper mints a few years into his reign.

The reading of the Kamra inscription is not certain so this remains a tentative suggestion, but if true some historical memory may have been preserved in Buddhist sources. The later Buddhist historian Taranatha, whose account is a pious and credulous mixture of legends and distorted half-truths, writes as follows:

> Many years after the reign of king Śrī-canda, in Di-li (Delhi?) and Mālava in the west, king Kaṇika ascended the throne at a young age. He became extremely prosperous by discovering twenty eight mines of gems. In each of the four directions he built a temple. In these he continuously entertained thirty thousand monks of both Hīnayāna and Mahāyāna. From this one should know that Kaṇika is not the same person as king Kaniṣka (Chattopadhyaya *et al.* 1970, 131).

Taranatha's aside occurs in the context of the discussion of the Buddhist writer Mātṛceṭa, though the two are not explicitly connected. Mātṛceṭa, as discussed earlier (§D.5.1), is part of the literary circle sometimes attributed to Kanishka I on the basis that he wrote a letter of advice to a young king, entitled *Mahārājakaniṣkalekha*, a letter to the Great King Kanishka (Hahn 1999).

Bu-ston's *History of Buddhism* makes Mātṛceṭa the pupil of Āryadeva who was the pupil of Nāgārjuna (Hahn 1999, xxxiii), and the letter itself is usually read as being directed from an old teacher to a young king (*ibid.*, xxxvi). Such a reconstruction is, however, impossible to reconcile with a historical reality of the epistle being directed to Kanishka I. If we take seriously the Buddhist scholarly consensus which places Nāgārjuna *c.* AD 150 (Buswell 2004, 581), or the more specialist accounts which place him slightly later (Walser 2005, 59–79), then elderly Mātṛceṭa could only realistically be addressing Kanishka II or Kanishka III, the latter of whom is the only Kushan ruler our evidence suggests ascended at a young age.

Of course, the connection remains tentative. Our evidence that Kanishka III was a minor is slight, and while the first verse of the *Mahārājakaniṣkalekha* makes explicit Mātṛceṭa was elderly, it is over-reading it to take verse 75, 'you who have the eyes of a young deer', as indicating the king's youth. However, it would be wrong to dismiss the document's title as a pious attribution to a legendary king. Though the framework is built around general Buddhist concepts it also interweaves a theory of moral kingship (verses 9–12, 31–7, 39–44, 46, 48–9, 66, 73–5, 83–5) by a writer sufficiently versed in the history of the region to play on the title *devaputra* and to be familiar with the term Kushan and its dynastic usage:

> (43) Break the hold of former laws that were enacted in error, even when they exist as of old, and make a new code of law marked by the name of King Kaniṣka. (44) Your Majesty – you who are like a god – intent on virtue, practice only virtues, like a god. Your Majesty – you who are like a god – as one who knows fault, do only what is faultless, like a god … (49) You who were born into the lineage of the Kuṣāṇas and instructed according to the (teachings of the) self-arising Buddhas must see to it that the religious system of the solar race, your noble lineage, does not degenerate (Hahn 1999, verses 43, 44, 49).

Taking the *Mahārājakaniṣkalekha* as an historic document actually addressed to a Kushan king would be over-reaching but it is likely it was written in the reign of Kanishka III (*c.* AD 267–72) and reflects monastic attitudes towards the theory of statecraft in the Kushan period and context.

It is tempting to connect these tentative pieces of evidence, and assuming that Vasudeva II was the younger brother of Vasishka (which would fit our understanding of Kushan naming practice where names or elements of them are sometimes drawn from grandparents, for example Kujula Kadphises > Wima Kadphises) to deduce that Kanishka III ascended the throne as a child and was usurped by his uncle and as a result was able to continue his rule only for a short period under the protection of the Kushanshahs (see §I.6) before their military defeat by Vasudeva II. However, we would caution against this sort of positivist scholarship. While it explains the diverse fragments of evidence it is precisely the sort of reasoning that led an earlier generation of scholars to create extensive theories of joint kingship, and as such should be treated as no more than a possible hypothesis, of a very different order to the numismatic analysis which leads us to believe that coins naming Vasudeva II succeed Vasishka's and that the mint acknowledging Kanishka III is a new facility.

I.2 Kanishka III: problems of chronology

Kanishka III's inscriptions make his position within the sequence of Kushan kings very clear. The Ara inscription's date in year 41 is in the second Kushan century, so dated *c.* AD 267. The past attempts to place him as a co-ruler with Huvishka (Agrawal 2014, 332) no longer make sense. It is as a result of that co-rule theory that many older publications, particularly Soviet archaeology (Rtveladze and Pidaev 1981, 82–5; Zeymal 1983, 251–6), use the appellation 'Kanishka

III' or 'Kanishka II/III' when referring to Kanishka II. The earlier king is almost always intended in these contexts, because Kanishka III's coins, especially copper, are found in very modest numbers and never north of the Hindu Kush (see §G.2 above for a fuller discussion of these issues).

I.3 Kanishka III: royal images

The only images of Kanishka III are on his coins and all show him standing wearing armour with a pointed helmet (on gold and copper coins), or the usual belted tunic and leggings under an overcoat (only on copper coins), making an offering at a small altar and holding a trident standard. He has a halo round his head and on some dies has flames emanating from his shoulder. On some gold dies he has a decorative panel down the front of his armoured tunic.

I.4 Kanishka III: forms of name and titles

Kanishka III in the Ara inscription dating formula is spelt *kaniṣka* in Gandhari. On his coins it is KANHÞKO in Bactrian followed by the usual dynastic name KOÞANO.

The Ara inscription has the full imperial titles *maharaja rajatiraja* and *devaputra* (Skinner 189; CKI 158). Attempts were also made to read in this inscription and in a graffito from the upper Indus (Skinner 189; CKI 158; Konow 1929, 162–5; Shrava 194) the title *kaisa*[*ha*]*ra*, representing the Roman title Caesar, but the readings are questionable as the inscriptions are both in poor condition at these points, although on the Ara inscription what is visible can fit this word. Mātṛceṭa's letter discussed above (§I.1) preserves both the title *maharaja* and the epithet Kushan (*kasana*).

I.5 Kanishka III: religious connections and imagery

The coin designs on Kanishka III's coins follow the same pattern as on his predecessors' coins, with Oesho and a bull on the gold coins and enthroned Ardochsho on the copper. A three-headed Oesho appears on a few gold dies (I.G1-ii, reverse 1b; Tandon 2011, 393). The relationship between the king as making an offering at an altar and the gods as offering a diadem also follows the pattern established under Wima Kadphises.

I.6 Kanishka III: contemporaries and international contacts

No records relating to this reign survive, but contemporary Chinese chronicles repeat earlier accounts of the Kushan empire (Falk 2015a, 130–1). One of these provides the only physical description of the Da Yuezhi. An 8th-century Chinese historian quoting a 3rd-century source described them as reddish-white in colour, skilled in archery and horsemanship. There is no clarity in this reference to who is meant, whether it describes the original Da Yuezhi nomads or the ruling elite of the Kushan empire (Falk 2015a, 131; Zürcher 1968, 372).

The coins themselves, sharing features (dotted control marks and the ribbons on the trident) seen on Kushano-Sasanian imitations of Vasudeva I's gold coins (F-imit.G1), have implications for relations with the Kushanshah. It is likely that some Kushanshah personnel or practices were employed in Kanishka III's mint (Ch. 3 §I.1). That Kanishka III's coinage was replaced by Vasudeva II, who also overstruck Kushano-Sasanian coinage in large numbers, suggests a complex and fluid political situation. The transfer of Kushano-Sasanian practice to Kanishka III's mint might suggest support for one side in an internal conflict over the throne but the evidence is slight and only a limited weight should be placed on it.

J.1 Vasudeva II, c. AD 267–97: historical account

Vasudeva II is the first Kushan king to be known only from his coins. His role as a usurper of the Kushan throne, challenging then ousting Kanishka III, is deduced from the pattern of coinage. His coins follow directly on from both Vasishka at his main gold mint and from Kanishka III at his subsidiary gold mint. His copper coins at one mint (J.C3-i) follow those of Kanishka III (I.C1-ii). The sequence of coins suggests that he was successful in his usurpation of Kanishka III's throne after a few years of rivalry.

His contacts with the Kushano-Sasanian invaders were direct and manifested in the overstriking of their coins by his mints. Early copper issues (J.C1-i), contemporary with the third phase at the main gold mint (J.G1-iii), have been recorded overstruck on a copper issue of Kushanshah Peroz I (T.C2-ii) and later coppers (J.C1-ii), contemporary with the beginning of the main gold mint's fourth phase (J.G1-iv), have been seen overstruck in large numbers on issues of Kushanshah Hormizd I (U.C2-iii). The frequency of the later overstrikes suggests a large quantity of Kushano-Sasanian coins, possibly from a mint or treasury, fell into the hands of the Kushan copper mint.

The gold coins issued at the subsidiary gold mint following the take over of that mint from Kanishka III have caused some confusion as their Bactrian inscriptions deteriorate and have given rise to the suggestion that they are the issues of a king called Vaskushana (Falk 2015a, 127). At the beginning of this mint's production the Bactrian inscription names the king clearly: ÞAONANO ÞAO BAZOΔHO KOÞANO (J.G2-i, obverse 1A), but later in the phase the inscription is corrupted to: ÞAONANO ÞAO BAZO KOÞANO KOÞAO (obverse 1B). In the second phase the correct inscription is restored (J.G2-ii). The reverse inscriptions also move from correct, reading OHÞO (J.G2-i, reverse 1a) to blundered ÞAONA (reverse 2a) and back to correct OHÞO (J.G2-ii). The coins with the inscription read as Vaskushana are simply blundered by an incompetent die engraver.

Vasudeva II's success in wresting complete power from Kanishka III is clear from the coins. His overstriking of Kushano-Sasanian copper coins in large numbers also suggests that he may have reasserted Kushan imperial power against the Kushano-Sasanians. The coins he overstrikes are the Begram or Peshawar issues of Hormizd I (U.C2-iii), and Göbl (1984, 87) reports a hoard of the overstriking Vasudeva II's coins found in the Peshawar region. This hoard now resides in the Peshawar Museum and its records (Ali *et al.* 2004, nos 6155, 6156), say that it was found at Akhun Dheri (Akhundari, 13.5km north of Charsadda). This hoard suggests the activities of Kushan forces in the Peshawar region in the later half of Vasudeva II's reign, challenging Kushano-Sasanian control of that region.

J.2 Vasudeva II: problems of chronology

This is the first Kushan reign to have no inscriptions at Mathura since the city was added to the Kushan empire in the reign of Wima Takto. The possibility that inscriptions may have been misattributed to Vasudeva I has already been discussed (§F.2) and it seems very unlikely. Although Kushan coins continue to flow into this region it seems likely that Kushan control of Mathura ended during the reign of Vasishka (*c.* AD 246–67) or early in the reign of Vasudeva II. Perhaps the internal struggle between Vasudeva II and Kanishka III and conflict with the Kushano-Sasanian kingdom led to a withdrawal of the Kushan administration from this base in India, as it consolidated in the upper Punjab. There is no firm evidence to show the extent of Kushan territory in this period other than the continuing role of two gold mints and three copper mints. The boundary between the Kushan empire and the Kushano-Sasanian kingdom must have been in Gandhara, but remained fluid as each side tried to gain control of territory.

The first mention of a Sasanian Kushanshah in Iranian sources is in Pahlavi as *kwšn MLKA*, but no name is mentioned, in the Paikuli inscription (AD 293–6) of Sasanian emperor Narseh, i.e. towards the end of Vasudeva II's reign (Skjærvø 1983, 70; Falk 2015a, 132).

The length of Vasudeva II's reign is unknown and estimated here on the basis of its relationship with those of Kushanshahs Peroz I and Hormizd I through overstrikes and on the number of dies estimated for its gold coinage, in comparison with earlier reigns (see **Table 3.13**).

J.3 Vasudeva II: royal images

As under Vasishka two depictions of the king appear on Vasudeva II's coins. One in overcoat, tunic and leggings and tall headdress and the other in full armour. The postures and attributes of the king are also the same as those in previous reigns. The different dress distinguishes the products of the two mints. The silver pyxis published by Falk and Sims-Williams (2017) depicting a king with a Bactrian label identifying him as Vasudeva is attributed by them to Vasudeva I, but attribution to the reign of Vasudeva II cannot be ruled out (see §F.3).

J.4 Vasudeva II: forms of name and titles

By the reign of Vasudeva II, Bactrian coin inscriptions were becoming less clear, but on early coins of both his mints the usual Bactrian inscriptions naming the king and with imperial title are legible: ÞAONANO ÞAO BAZOΔHO KOÞANO, the same formula as had been used since the reign of Kanishka I. Apart from the blundered inscription mentioned above (§J.1), the subsidiary mint continues to be legible until the final phase when the Bactrian inscription is off the flan (J.G2-iii). At the main gold mint the Bactrian inscription remains legible through the first two phases (J.G1-i, -ii), but in phase iii is still legible but mostly off the flan, and in phase iv it becomes blundered and increasingly off the flan. Traces of Bactrian inscriptions can be seen on a few copper coins, but always off flan and blundered. The gradual decreasing legibility of the Bactrian inscriptions led to the introduction of a new royal inscription in the form of a vertical Brahmi monogram *vasu* in the right field of the coin. This represented the initial syllables of the king's name and from this reign such Brahmi monograms became the normal way to identify the issuing king.

J.5 Vasudeva II: religious connections and imagery

The standardised coin designs inherited by Vasudeva II's mints from issues of Vasishka and Kanishka III show continued use of the limited set of gods from the Kushan pantheon: Oesho and bull, and enthroned Ardochsho, which serve to distinguish the products of the two mints until the last phase when Ardochsho was used at both mints. The images of the gods are the same as used in previous reigns. The pyxis with a king Vasudeva honouring the Buddha raises the possibility of royal patronage of Buddhism during this reign (see §F.3 and §F.5).

J.6 Vasudeva II: contemporaries and international contacts

Apart from the relationship with the Kushano-Sasanian kingdom to its west, there is little known about the relationships of the Kushan empire with its neighbours during this period, other than what can be deduced from its contemporaneity with other political entities. The Roman record of the reigns of its emperors mentions relationships with Bactrians and Indians during the reign of Aurelian (AD 270–5):

> Blemmyes, Axomitae, Arabes Eudaemones, Indi, Bactriani, Hiberi, Saraceni, Persae cum suis quique muneribus (There were Blemmyes, Axomitae, Arabs from Arabia Felix, Indians, Bactrians, Hiberians, Saracens and Persians, all bearing their gifts) (*Historia Augusta*, *Aurelianus* 33.4: Magie and Ballou 1932, 260–1).

> Illum Saraceni, Blemmyes, Axomitae, Bactriani, Seres, Hiberi, Albani, Armenii, populi etiam Indorum veluti praesentem paene venerati sunt deum. Illius donis quae a barbaris gentibus meruit, refertum est Capitolium (He was revered as a god, almost as though present in person, by the Saracens, the Blemmyes, the Axomitae, the Bactrians, the Seres, the Hiberians, the Albanians, the Armenians, and even by the peoples of India. His donations, won from barbarian tribes, fill the Capitol) (*Historia Augusta*, *Aurelianus* 41.10–11: Magie and Ballou 1932, 276–7).

It can be assumed that Bactrians represent contact with the Kushan empire or the Kushano-Sasanian state which now held Bactria. There are no references in the Chinese chronicles relating directly to the Kushan empire during this reign.

As noted above (§J.1) Vasudeva II is the first Kushan king not to be known from inscriptions at Mathura and this suggests that the city was no longer under direct Kushan administration in his reign. It is otherwise implausible that no dedicatory inscription was made between the 250s when those mentioning Vasishka were inscribed and the beginning of the 5th century when the first Gupta example appears.

In nationalist historiography both before and after the Second World War the end of Kushan rule in Mathura (usually simply referred to as India) was coloured by the contemporary freedom struggle in modern India. It is thus often presented as an alliance of 'tribal' or 'indigenous' states

(see Mukherjee 1977 for an influential discussion of the terminology) to oust the 'foreign' Kushans, 'a movement for freedom from the Kushan rule' (Jayaswal 1943, 161). Various states (*ibid*.) are frequently mentioned in this connection: the Malavas, Nagas (Trivedi 1957), Yaudheya (Handa 2007, 153–4), the Kunindas and the Kota, with different authors favouring one or the other of these groups (see Lahiri 1974, 319). There is very little doubt that the Malavas are contemporaries of the period of Vasudeva II as their inscriptions begin in the year 282 of the Vikrama era = AD 235 (Altekar 1955), though their coins may be later. Kota coins were current in the late 3rd century, as were those of the Naga rulers, so both would have been contemporaries of Vasudeva II. Much has been made of the mention in the Puranic accounts that the Nagas ruled at Mathura (Pargiter 1913, 53 and 73), though no supporting evidence has ever been found that their influence extended that far north. Despite this the Nagas continue to be placed in between Kushan and Gupta rule in the city, and some scholars continue to assume that the Kushan dynasty itself ended in this period (Chakravarti 2014, 49–50), though, as will be discussed below, the Kushans remained an important power into the Gupta period in the 4th century (see §K–N.1 below). In any case the basic problem remains the disproportionate attention that has been given to the Kushans compared to these dynasties, with Lahiri's remark in 1974 as true today as it was then:

> The attention of writers on the early history of India has been generally drawn by the interesting story of the successive rule of the Greeks, Scythians, Parthians and Kushāṇas in the north-western parts of the Indian subcontinent and the adjoining areas in the period between the fall of the Mauryas and the rise of the Guptas, i.e. *c.* 200 BC to AD 320. The history of the indigenous ruling families and clans of Northern India which flourished in the same age and played no small part in contemporary politics, has usually been neglected (Lahiri 1974, ix).

None of these coinages have standard treatments and the literature on each group is slight. In many cases the earlier constructions have depended on chronologies now demonstrably false, and on a juxtaposition of 'foreign' Kushans and 'indigenous' states that seems unwarranted, as well as a contrast between imperial and local powers that should be more critically questioned. Many of the states described as tribal or local would more profitably be thought of as similar in size and capability to the Kushans. As argued in previous sections it seems unlikely that the advent of Kushan power expunged independent kingdoms in the Gangetic valley (at least Magha and Ayodhya retained their functional independence, probably also the Yaudheya and possibly the Panchalas). This points to the Kushans operating within a complex network of alliance and warfare throughout the 2nd and 3rd century, rather than in a cycle of supremacy and decline as existing historiography suggests.

K–N.1 Mahi, c. AD 297–302; Shaka, c. AD 302–42; Kipunadha, c. AD 342–52; and Meśra, c. AD 297–300: historical account

The last three Kushan kings, like Vasudeva II, are only known from their coins. Their identification is based on the practice established under Vasudeva II of indicating the issuing king by a Brahmi monogram in the right field of the obverse. This practice continued on gold coins into the subsequent period of Kidarite rule in former Kushan territory and was also adopted by the Guptas. As is demonstrated by the coins of Vasudeva II and later by the Gupta kings Samudragupta and Chandragupta II (**Fig. 2.54a–b**), the monogram was often a shortened version of the king's name: *vasu*, *samudra*, *candra*, but as in the case of the Kidarites, Kirada, Peroz and Kidara, their whole names *kirada*, *peroza*, *kidara* could be written in full in the monogram. So for these late kings we have here adopted the convention of naming them from their monograms: *mahi*, *ṣaka*, *kipunadha*, because if they have a longer name it is not discernible on the coins. A recently discovered sealing, reportedly found in Mardan District, has the monogram *ṣaka* together with the Kushan royal tamga, so perhaps also refers to this king (see §G.4 above).

Along with these late kings we also consider here a king whose monogram *meśra* gives him the name Meśra. In other publications he has been called Magra and Mashra because some of the coins have badly written monograms, but on the best-preserved examples the reading is clear. Meśra's coins include a blundered Bactrian inscription giving him the dynastic name Kushan, but he was probably not related to the Kushan dynasty. His dress (see below) distinguishes him from the direct Kushan succession, showing that he presented himself in a distinct fashion. The position of his coins makes him a contemporary of Mahi, taking over one of Vasudeva II's gold mints for a short period until it was re-started by Mahi towards the end of his brief reign, so it is likely that he was a usurper.

The kings are ordered by the sequence of their coins, and Kipunadha is identified as the last Kushan as his coinage is the prototype for the issues of the Kidarite kings. This would make Shaka the penultimate king of the dynasty. His position in the sequence makes him the only late Kushan king recorded in a non-numismatic source, as he appears to be the Kushan king named śaka in the Allahabad inscription of the first Gupta emperor Samudragupta (*c.* AD 330–80). The inscription (Fleet 1888, 8, 14, line 23; Bhandarkar and Chhabra 1981, 213, 217–18) gives the Kushan royal titles in a Sanskrit version of the Bactrian ÞAONANO ÞAO with the usual Kushan title *devaputra*: *daivaputra ṣāhi-ṣāhānuṣāhi*, as recognised by Ray (1931, 55) and Sircar (1951a, 153). Although the version of his name on his coins is *ṣaka*, in the inscription it is written śaka. Following his name is the word *muruṇḍa* which could represent the second part of his full name or a title (for a discussion of the word see §G.4 above and §K–N.6 below).

The various attempts to understand the late Kushan rulers after Kanishka III in histories of the Kushan empire have tended towards ignoring them or reassigning the coins to earlier kings. Chakravarti (2014, 49) has argued that 'it is nearly impossible to see any Kushana political existence in view of their politico-military ouster [sic] in the hands of the Sassanids' and using the misread inscription of Vasudeva I (Skinner 127) as dated to 170 and re-attributed to a 'Vasudeva II' (Chakravarti 2014, 53), saw AD 248 (i.e. year 170 of the Śaka era), as 'the very last phase of Kushana rule

Figure 2.54a–b Gold dinars of Samudragupta and Chandragupta II, Gupta kings of northern India, with image of the king on the obverse and the goddess Śrī on the reverse (a) BM 1983,0215.1, 7.55g, 19mm, b) BM 1910,0403.19, 6.79g, 21mm).
The inscriptions on the coins give the names and titles of the kings. The representations of both king and goddess on these coins are based on those appearing on late Kushan gold coins, the royal image replacing the Kushan trident standard with a Garuda standard and the goddess retains the throne and cornucopia of the Kushan goddess Ardochsho

which ended around or soon after AD 250'. The latest coins Rosenfield included in his study of the Kushans were the issues of Vasudeva II with the monogram *vasu*. He attributed them to the reign of Vasishka (Rosenfield 1967, 112–14), and saw the end of Kushan inscriptions at Mathura as the end of the Kushans in India. He thought the Kushans continued to have some rule in the north-west because he attributed the imitation coinage of Vasudeva I issued by the Kushano-Sasanians to the Kushans in the late 3rd century AD (*ibid*., 116–17). The coins of Kanishka III and of Vasudeva II's subsidiary mint he assigned to the kings identified here as Vasudeva I and Kanishka II in the period after the Sasanian incursions, which he considered 'ephemeral' (*ibid*., 112, 116). Likewise MacDowall (2005) listed no king subsequent to Vasudeva II and also attributed most Kushanshah imitations to the Kushans. Because of its focus on literary sources, the overview of Kushan history compiled by Falk (2015a) ends with the Sasanian invasion of Kushan territory. Göbl was meticulous in listing the gold coins of the kings after Kanishka III and Vasudeva II (Göbl 1984, 87–9, pls 37–8; 1993a, 40, 167–70), but then described the coins of the following rulers as issues of palace officials 'maiores domus' or 'Hausmeier' sharing power (1984, pls 39–46; 1993a, 167), denying them equivalent status to the early kings without further discussing their identity or status. Rezakhani (2017, 70) says that the late Kushan emperors after Vasudeva II were 'local authorities in the Taxila region, under the overall suzerainity of the Gupta emperors', following Göbl.

Far from being a failing state run by palace officials and subjects of the Guptas, the Allahabad inscription demonstrates the status of the Kushan empire at the time of its encounter with Samudragupta. It refers to the titles of the Kushan emperor in full, but gives no such titles to other rulers and states, who are grouped into simple lists as captured or exterminated or submitting to Samudragupta's rule (Bhandarkar and Chhabra 1981, 212–13; Fleet 1888, 7–8, lines 19–22). Of the Kushans (and the Murundas (see §K–N.6 below) if that is the correct interpretation) and the people of Sri Lanka, the inscription implies alliances rather than submission, exchanges of royal symbols, gifts and free movement. The Gupta emperor is treating the Kushan emperor as an equal as the Allahabad inscription itself and Samudragupta's coins make their shared status clear. The Gupta emperor uses the same 'king of kings' title as the Kushan emperor: *mahārājādhirāja* (Bhandarkar and Chhabra 1981, 214; Fleet 1888, 8, 16, line 28). Far from subjecting a rump state, the Gupta emperor seeks to use the status of the Kushan kings in order to elevate himself by excelling them as the pre-eminent power of North India.

The strength of the Kushan emperor can perhaps also be seen in the collapse of the Kushano-Sasanian kingdom south of the Hindu Kush during Shaka's reign. The Kushano-Sasanian king Peroz II is the last to rule both north and south of the Hindu Kush and the Sasanian emperor Shapur II has to intervene to keep control of the region between the Hindu Kush and Peshawar. A find of Shapur II's coins at Taxila (Marshall 1951, 823) suggests that his intervention may have damaged the Kushan empire in the reign of Kipunadha. The collapse of Kushano-Sasanian power was undoubtedly caused by the rise of the Kidarite Huns who rapidly seized power in Bactria/Tokharistan and in Gandhara where they brought the Kushan empire to an end.

More evidence from excavations and coin hoards is needed to flesh out the scenario which the coins present, but the sequence of the rulers and their interactions with the Gupta and Sasanian empires and the Hun invaders is clear in its broad outlines from the coins and the Allahabad inscription.

Approx. years AD	Kushan emperors	Kidarite kings	Kushano-Sasanian kings	Sasanian emperors	Gupta emperors
230–40	Kanishka II 230–46		Ardashir I Ardashir II	Ardashir I 223–40	
240–70	Vasudeva II [Kanishka III]		Peroz I overstruck on Shapur I, overstruck by Vasudeva II	Shapur I 240–70	
270–300			Hormizd I overstruck by Vasudeva II	Hormizd I 272–3 Varahran I 273–6 Varahran II 276–93 Varahran III 293	
	Mahi [Meśra]		Hormizd II	Narseh 293–303 Hormizd II 303–9	
300–40	Shaka treaty with Samudragupta		Peroz II	Shapur II 309–79	Samudragupta 330–80
340–50	Kipunadha	Kirada copying Kipunadha; Peroz	Varahran in Bactria	Shapur II in Kabul	
350–90		Kidara			coinage with Kidara
390–420		Orōlano hoarded with Shapur III		Ardashir II 379–83 Shapur III 383–8	Chandragupta II *c.* 380–412
		Pidoko			
420–67		Tobazino overstrike Varahran IV and Yazdagird I	Alchon Huns at Kabul, hoarded with Varahran IV and Yazdagird I	Varahran IV 388–99 Yazdagird I 399–420	
		Ōkilano			
		Ōzmano?	?		
467–76		Peroz in Balkh			

Table 2.12 Framework for later Kushan chronology

The reign of Kipunadha in Gandhara and the Taxila region apparently coincided with the reign of the Kushano-Sasanian ruler Varahran in Bactria (see §R–Y.1), as both were succeeded by the first Kidarite Hun rulers (see §Y–Z.1). This is the period of the first of the Bactrian documents (Sims-Williams 2007; 2012a; 2012b). Two of the documents, **ba** (Sims-Williams 2007, 52–5) and **bg** (*ibid*., 64–5), mention the Kushano-Sasanian Kushanshah by title: κοϸανοϸαο and document **ba** names him as Varahran οαραρανο and gives him the title 'great' used by the Kushans: στοργο. Document **bg** also gives the king what appears to be a version of the Kushan title *devaputra* (son of the gods): βαγοποριγο (Sims-Williams 2007, 200). All the documents, mostly contracts and letters, come from northern Afghanistan, so outside the Kushan kingdom, but within its former territory.

K–N.2 Mahi, Shaka, Kipunadha and Meśra: problems of chronology

The chronology presented for these kings is conjectural and based on the establishment of the sequence of their issue, some hoard evidence and the limited evidence of their relationships with the Sasanians, Guptas and Kidarite Huns (**Table 2.12**). The connection between Shaka and Samudragupta is one of the keys, but its precise date is not known. Some indication is possible from the volume of coinage, but as the die counts (see **Table 3.13**) show there was a dramatic increase in coin production under Shaka and Kipunadha. The copying of Kipunadha's second phase gold coins (M.G1-ii) by the Kidarite Hun rulers Kirada (O.G1) and Peroz (P.G1) also indicates that the Kidarite Huns began their incursion into Gandhara during his reign.

Hoards provide some chronological context for these late kings. A hoard found at Mithathal in Harayana in 1916 contained both Kushan and Gupta coins, the latest of which were Shaka and Samudragupta coins, suggesting they were contemporaries. Only 16 coins of 86 in the hoard were reported (Whitehead 1917), consisting of Vasishka (Ardochsho 1, Oesho 2), Kanishka III (Oesho 1), Vasudeva (Ardochsho 2), Shaka (Ardochsho 2, both L.G1-i, obverse 2A) and Samudragupta (standard type 5, asvamedha type 1 and battle axe type 1). A trade hoard published by Mitchiner (1975) contained Kipunadha coins with Gandharan issues with the name of Samudra[gupta] (Q.G3-i) and a figure wearing the crown of the Kidarite king Kidara. The Jhang hoard (Khan and Hasan 2017) shows coins of the two Kidarite rulers who copied issues of Kipunadha (M.G1-ii) hoarded alongside Gupta and Sasanian coins. The Sasanian coins belong to Peroz's second phase, so were produced before AD 466 and the latest Gupta coins are issues with the name Chandragupta (III), but attributed to Purugupta (Tandon 2013; 2014), *c.* AD 450–5. The hoards also contained coins of two Kidarite rulers, Kirada (O.G1-ii) and Peroz (P.G2-ii), who based their issues on Kipunadha's coins (M.G1-ii). Another mixed hoard found at Tepe Maranjan in Kabul in the 1930s (Curiel 1953) provides another indication of the chronology of the period, as it contains gold coins of the Kidarite Hun kings Kidara and Orōlano, together with silver coins of the Sasanian emperors Shapur II, Ardashir II (AD 379–83) and Shapur III (AD 383–8). The Kidarite coins

are Bactrian issues brought to the region, perhaps by a Hun attack, and the Sasanian coins were locally produced, so the dates of the last Sasanian coins are likely to be indicative of the date of deposit. Kidarite copper coins from Balkh are also present in number at Begram indicating a Hun incursion at this period (Khan *et al.* 2008, 68–70).

These hoards, the issues in the style of Kidara with Samudra[gupta]'s name, the Allahabad inscription, the clear use of Kipunadha prototypes by Kirada and Peroz, and the successions established within each series, combine to establish one clear chronological relationship. Shaka, Kipunadha, Kirada, Peroz and Kidara must all have overlapped in their rule with Samudragupta. Unfortunately, Samudragupta's reign is not precisely defined by inscriptional evidence, as it is only limited by the inception point of the Gupta era (*c.* AD 319) and the first inscription of his successor Chandragupta (year 61 of the Gupta era *c.* AD 380). Estimates of his rule vary considerably encompassing both AD 330–75 (Altekar 1957, 2–4; Kumar 2017, 15–18) and 350–75 (Willis 2005, fig. 1).

The position of Meśra as a contemporary of Mahi immediately between the coinages of Vasudeva II and Shaka is based on the close relationship both series show to the coins of Vasudeva II, Meśra's coinage continuing the control mark and style of Vasudeva II's coins and Mahi repeating the two-mint division of the last coins of Vasudeva II, with the king holding his right hand open and the throne on the reverse having a single upright at the main gold mint (K.G1-i) and with closed hand and double upright at the subsidiary gold mint series (K.G2-i). The main mint seems to have fallen under the control of Meśra at the beginning of Mahi's reign as there are very few surviving coins issued there by him. The *me* control mark used at Mahi's main mint continues into the beginning of Shaka's reign (L.G1-i).

K–N.3 Mahi, Shaka, Kipunadha and Meśra: royal images

The images of the last three Kushan kings on their gold are identical to those in use at the end of the reign of Vasudeva II, showing the king in overcoat, tunic and leggings and a tall headdress. Mahi, on one die (K.G2-i, obverse 1B), shows a small change in the form of a lion on top of his standard, rather than the usual ball finials. Slight changes in detail occur, such as the shape of the diadem ribbons, the height of the crown, but otherwise the images represent the same form of representation, with no differentiation between mints except in detail. The designs on their copper coins are very crude and poorly made copies of the designs on earlier copper coins.

Meśra's gold coins show him in two different postures. The normal type is based on the coins of Vasudeva II, showing him making an offering with his right hand at a small altar, surmounted by a trident, and holding in his left hand a standard with a wheel (*cakra*) on top or with ball finials on one die (N.G1-i, obverse 1B). The other type is only known from one die (N.G1-i, obverse 2A) which shows the king holding a flower before his face and resting his left hand on his hip. His head is surrounded by a halo, except on the second type. On all coins he is shown wearing a different costume to that worn by the Kushan kings. He has a low rounded cap, decorated with a row of dots, which covers his ears and the back reaches his neck. He seems to be wearing a tunic and leggings, but the tunic has long tails to right and left, and his leggings only reach his calves, so that he has bare feet, and the suspenders supporting them can be seen over the top of his tunic. He has a broad sash across his chest from left shoulder to waist where it joins a tight belt. A short dagger is hanging from the belt over his left hip. The shape of the tunic and the cap are similar to those worn by Samudragupta on his gold dinars. On Meśra's copper coins, only his head is seen, wearing the same cap, perhaps in imitation of contemporary Kushano-Sasanian copper coin designs.

K–N.4 Mahi, Shaka, Kipunadha and Meśra: forms of name and titles

All these kings are named after the Brahmi monograms featured in the right field of their coins: *mahi*, *ṣaka* or *ṣāka*, *kipunadha and meśra*. Apart from Kipunadha their gold coins have traces of blundered Bactrian inscriptions, often off the edge of the coin: Mahi and Meśra: ÞAONANO ÞAO KOÞANO ÞAO, and Shaka: ÞAONANO ÞAO KOÞANO ÞAKO. It is unclear whether the KOÞANO ÞAO inscription is intentional, copying contemporary Kushano-Sasanian coins, or simply an error with the second [ANO] ÞAO copying the first.

The titles given to Shaka in the Allahabad inscription (line 23) follow earlier Kushan practice, but with a Sanskritised version of the Bactrian ÞAONANO ÞAO with the usual Kushan title *devaputra*: *daivaputra ṣāhi-ṣāhānuṣāhi* (as recognised by Cunningham 1888, 55; Ray 1931, 55 and Sircar 1951a, 153; Fleet 1888, 8, 14; Bhandarkar and Chhabra 1981, 213, 217–18). That the name is inscribed *ṣaka* on the coins but *śaka* in the inscription has caused Sanskritists significant difficulties but the problem is probably overblown. The framer of the inscription had likely heard rather than seen the name and as has been seen at several points in the dynasty the various scripts of the period often had difficulties precisely rendering the sounds of Kushan names.

K–N.5 Mahi, Shaka, Kipunadha and Meśra: religious connections and imagery

The coins of the last Kushans provide no information about Kushan religious cult as they are simply stereotype copies of earlier Kushan designs. The gold coins use Ardochsho reverses exclusively, though Oesho continues to appear in copper issues. This likely reflects increasing immobilisation of designs, a common numismatic feature, rather than any shift in official policy.

K–N.6 Mahi, Shaka, Kipunadha and Meśra: contemporaries and international contacts

The coins of the last Kushans herald the end of the dynasty. From the reign of Shaka, the Indian empire established by Samudragupta was expanding and offered no opportunity for the Kushans to retreat before the advances of the Kidarite Huns and the increase of Sasanian power in the Kabul valley by the direct rule of the Sasanian emperor Shapur II. Shapur II coins found at Taxila (Marshall 1951, 823) suggest he may have pressed into Kushan territory at

the same time as the Kidarite Huns were establishing themselves there. The only reports of activity in Kushan territory in Chinese sources of this and the following period relate to the Kidarites (see §Y–Z.1 and .6 below).

The Allahabad inscription has the words *śaka muruṇḍaih* (Fleet 1888, 8, 14, line 23; Bhandarkar and Chhabra 1981, 213, 217–18) following the Kushan royal titles. Fleet, and Bhandarkar and Chhabra, both translate the inscription as a list. Fleet breaks the phrase down as a series of peoples: 'Daivaputras, Shahis, Shahanushahis, Sakas and Murundas', and Bhandarkar and Chhabra as 'the Daivaputra-Shahis-Shahanushahis and the Saka lords', accepting the identification of the first three words as a reference to the Kushans, but translating *muruṇḍa* as lords (Bhandarkar and Chhabra 1981, 26–30), following Konow (1917–18, 293–4; 1929, xx). The whole phrase is a Sanskrit compound ending in a plural *–ih* inflection, which encouraged these translations. More likely is the use of an honorific plural and the whole compound, as its initial parts suggest, a reference to a single king, called *śaka-muruṇḍa* (see §K–N.1 above). The context of the compound is distinguished from the lists of the kings and peoples submitting to or conquered by Samudragupta by both its phrasing and its position within the inscription.

There are other references to *muruṇḍa* which have also been linked to the Zeda and Allahabad inscriptions. Ptolemy's *Geographia* (7.2.14: McCrindle 1885, 212; Eggermont 1966) refers to a people called the Maroundoi living beyond the Ganges, i.e. in northern or eastern India. The *muruṇḍa* are mentioned in the *Vāyu Purāṇa* (and as the *muṇḍa* or *guruṇḍa* in other Puranic texts) as a foreign dynasty, listed in the text after the Śakas (Scythians), Yavanas (Greeks) and the Tusharas (normally identified as the Kushans) and before the Hunas (Huns) (Eggermont 1966, 284; Pargiter 1913, 72; see also Allan 1914, xxix–xxx; Falk 2015a, 136–7). The Puranic texts are not always easy to interpret and two different readings of the number of years the Murundas lasted have been proposed: Pargiter reading 200 and Eggermont 103.5 years. If Pargiter's reading is accurate, then this looks like a description of the Kushans, whose 13 kings of foreign extraction rule for about 200 years (AD 50 to 350). If this is the case then the reference to the Tusharas who ruled for 107 or 105 years (Pargiter 1913, 72, correcting the 7000 or 500 years in the texts; Eggermont 1966, 284, reading 105 years), could be a repetition of the Kushans by the Puranas from a different tradition.

A Chinese source in the *Liang Shu* (History of the Liang dynasty, 54: https://ctext.org/wiki.pl?if=gb&chapter=26343#p35); mentions an Indian king called 茂論 (*moulun*, Late Han *mu-luən*, Middle Chinese *məu-lwən*: Schuessler 2009, no. 13-78, 34-24) in its account of the Southeast Asian kingdom of Funan as having given envoys from Funan four horses from the Yuezhi country in AD 240–5 (Eggermont 1966; Falk 2015a, 124–5), i.e. in the reign of Kanishka II. A 13th-century Jain text *Prabhāvakacarita* refers to king Murunda in Pataliputra in the 1st century BC (Shamasastra 1925) and *muruṇḍa* is attested in a group of late 5th to early 6th-century inscriptions from Satna District, Madhya Pradesh which mention a queen called *muruṇḍadevi* or *muruṇḍaswāmini* (Fleet 1888, 125–39). These references to a Murunda kingdom distinct geographically from the Kushan state suggest alternative explanations for the Allahabad inscription.

The evidence is very difficult to draw together into a single understanding either as representing a people or a name and suggests that more work needs to be done on trying to understand the interrelationships between all these terms. Until a clearer indication becomes available it is problematic, on the basis of the existing evidence, to equate the late Kushans with a people called the Murundas as has been done in some commentaries (Bivar 1956; Chattopadhyay 1967, 125; Singh 1973).

The Kushans must have interacted with the rising Gupta empire in the 4th century, but they were probably not neighbours. The Allahabad pillar inscription contains various lists which include names of polities to whom coins can be attributed and some for whom they cannot. In line 21 the inscription reads: '(Who) is great through the extraordinary valour, namely the forcible extermination of many kings of Āryāvarta such as Rudradēva, Matila, Nāgadatta, Chandravarman, Gaṇapatināga, Nāgasena, Āchyuta-Nandin and Balavarman' and three of these kings are also mentioned in verse 7 where it reads: 'By whom, with the impetuosity of the prowess of (his) arm, which grew to overflowing, having singly and in a moment uprooted Achyuta and Nāgasena and [Gaṇapati] come together in a battle (against him), thereafter, causing, indeed the scion of the Kōta family to be captured by (his) forces …' (Bhandarkar and Chhabra 1981, 213; Fleet 1888, 7, 13, line 21; 6, 16, line 13).

It is worth noting that most of the polities the Gupta scribe thought worth mentioning do not appear to have issued coins, a healthy reminder that a state's continued importance is not a function of its monetary issues. So, for example, the Yaudheya are mentioned (in line 23), suggesting their continued political independence, but, given the heavy weight of their issues compared to the late Kushan copper, they were probably no longer issuing coins in the 4th century. However, the names Achyuta, Kota and Ganapati can be associated with coins.

The Kota issues had begun in the southern Punjab in about the reign of Vasishka (see §H.6.1) but a series of roughly shaped issues are known with a enthroned goddess reverse likely based on the types of Vasudeva II and weighing 1–2g (roughly equivalent to Kipunadha coins) (Cribb 1985c, 315–18). At the minimum this suggests familiarity with Kushan coin designs, and the low weights the coins reach further suggest that the Kotas did not end immediately with the arrival of the Guptas. Similarly, though Ganapati Naga is the last king to be named on his dynasty's coins, the coins themselves probably continued to be issued posthumously until the issue of Ramagupta coins after the death of Samudragupta (for a more detailed discussion of the Nagas see §J.6).

The third king in the list known from coins is Achyuta (**Fig. 2.55**). The inscription on the reverse of his coins usually reads just *acyu* and the obverse is a spoked wheel (Pieper 2013, 354–5, nos 1025–8). By weight these coins match the other late Kushan copper currencies. Imitations in this period (e.g. *ibid.*, 354–5, no. 1029) often mix elements of Kota, Kushan and Achyuta coinage together suggesting their common circulation, though evidence from hoards is wanting.

That these coins were found in significant numbers at Ahicchatra, a very substantial walled city in Uttar Pradesh has caused them to be catalogued and considered with the long series attributed to the Panchalas (see **Fig. 2.40a–c**), which were also found at the city and who are presumed to have had their capital at the site. The early Panchala series shows no Kushan influence, and usually features a divinity and an inscription within an incuse square, so they are usually attributed to the pre-Kushan period (Pieper 2013, 352–5) but this is complicated. Shrimali (1983, 57–62) surveys opinions, and many of the reconstructions would have the Panchala issues overlap substantially with the Kushans.

The finds of Kushan coins at Ahicchatra are substantial, with some 365 coins divided into issues of the state, as well as 'late' and 'imitation'; they were outnumbered only by the Panchala series itself. The excavators, in keeping with Indian practice at the time (the excavations were conducted from 1940 to 1944) periodised the site and referred to these periods as 'strata' (Ghosh 1990). Panchala coins were assigned to VI and V, Kushan to IV, and Acyu coins to III, though it is important to be cautious in assuming that this reflects actual sequencing. Shrimali (1983, vol. 2) catalogues all of the coins from the site, including both the locus recorded during excavation and depth from the surface (where the coin was not a surface find). Most are not imaged in publications, which makes it difficult, as many seem to be misattributed. For example, an imaged coin described as probably Gupta (Shrimali 1983, vol. 2, pl. XIX, no. 11) is pierced and, given its corrosion, probably a copper core (the metal is not specified) of an imitation of Shaka's second phase main mint, while an 'unidentified' Kushan coin (*ibid.*, pl. XIX, no. 7) weighs a little under 16g and is most likely a Wima Kadphises or Kanishka issue as it features a standing king. The only coins attributed are five to Huvishka, but these weigh 2.57 to 5.6g and one of them is described as having a 'seated goddess' reverse so they are probably post-Vasudeva issues. Judging solely by the weights it seems that the finds include a small but representative sample of coinage from Wima Kadphises to Kanishka III but that the bulk of the coinage are from the period of Vasudeva II until after the end of the dynasty, though it is impossible to say from weights what proportion are Kushan issues and what proportion are Kushanshah issues (F-imit).

A reappraisal of Ahicchatra and the Panchala coins seems warranted. Though Panchala coins are certainly recorded deeper in the strata than Kushan examples, there is also clearly an overlap and the bulk of the material described as Kushan probably dates *c.* AD 290–350, which suggests that the excavators are probably closing the layers with Panchala coins too early, and even Shrimali (1983, vol. 2, 6) is too cautious in closing the Panchala series in AD 125 with the arrival of Kanishka. However, without a careful re-attribution of the Kushan coins found at the site several important questions about why coins should have flowed into the site in the period of Mahi to Kipunadha rather than earlier remain unanswered.

Nor does this fully answer the question of the political status of the Panchalas and Ahicchatra. The city is not mentioned in the Rabatak inscription, unless it is intended by the unread name at the beginning of the sequence (see §D.1), which would suggest it was incorporated into the empire – a corollary to the argument already made that cities listed in the Rabatak inscription are probably being mentioned precisely because they were not incorporated. The site has yielded only a few published inscriptions, none particularly helpful. One fragmentary inscription (Lüders 1961, no. 162) mentions the Panchalas and the year 1, but the style of dating formula and its attribution to Mathura or Ahicchatra are unclear. It is incomplete and, if the name of the king was recorded, it is now missing. The formula for the date is incomplete so it is impossible to tell if it was in the same style used at Mathura, or employs the light/dark fortnights used elsewhere in the Gangetic valley, and therefore what era the year might be in. Lüders describes it as 'engraved in pre-Kuṣān' characters but such assessments of palaeography mean very little unless there is a long sequence of firmly dated inscriptions from the same region with which to compare it. Two inscriptions dated in the years 12 and 32 have been recovered from the nearby village of Ramnagar (Shrava 38 and 75) both with Mathura-style dating formulae, and of course both potentially dated in a later sequence of the Kushan reckoning. Neither of these mentions a ruler as part of the date.

Figure 2.55 Small copper coin featuring the inscription *acyu* and a wheel, usually attributed to Achyuta, apparently king of Panchala, 4th century AD (BM 1894,0507.1646, 1.85g, 13mm).
Achyuta was named in the Allahabad inscription of the Gupta king Samudragupta, a contemporary of the Kushan king Shaka

7 Kushano-Sasanians

R–Y.1 Kushano-Sasanians (c. AD 230–379): historical account

The chronology for the Kushano-Sasanian kings presented here (**Table 2.13**) is constructed on the basis of the relationships established through overstrikings and hoarding between them and their Kushan neighbours (Cribb 2018a) (**Fig. 2.56**). This chronology enables their relationship with contemporary inscriptions and references in texts to be integrated into an account of their history (see §R–Y.2 below).

Two Sasanian inscriptions bear witness to the establishment of Sasanian rule over former Kushan territory. The record of the achievements of Shapur I's reign (*c.* AD 240–70), the Kaʿba-ye Zardošt inscription, claims that 'Kushan territory as far as (literally 'in front of') Peshawar' is part of Shapur I's realm (Kaʿba-ye Zardošt inscription, line 3 *kwšnhštr H.N prhš OL pškbwr*; Huyse 1999, 24 and 36; Greek version line 4: κουσην[ῶν ἔθ]ν[η] ἕως ἔμπροσθεν πασκιβουρων; Sprengling 1953, 14, 73; Maricq 1958a, 306–7; 336). This inscription is thought to have been written *c.* AD 263. The Paikuli inscription of the Sasanian emperor Narseh mentions, without naming him, a Kushanshah (§92: *kwšn*

		Kushano-Sasanian kings	Dates AD	
1	R	Ardashir I	*c.* 230–5	
2	S	Ardashir II	*c.* 235–45	
3	T	Peroz I	*c.* 245–70	Overstriking Shapur I Contemporary of Vasudeva II
4	U	Hormizd I	*c.* 270–300	Contemporary of Vasudeva II
5	V	Hormizd II	*c.* 300–3	
6	W	Peroz II	*c.* 303–30	
7	X	Shapur II (Sasanian emperor)	*c.* 309–79	Ruling in Begram region from *c.* 330
	Y	Varahran	*c.* 330–59	Contemporary of Shapur II

Table 2.13 Sequence of Kushano-Sasanian rulers

MLKA) as the first in a long list of local rulers who acknowledge Narseh as emperor (Skjærvø 1983). The inscription is a record of Narseh's accession in AD 293 and was written between that date and his death in AD 303. The Rag-i Bibi monument near the road from Bactria/Tokharistan down towards the Kabul valley, datable to the reign of Shapur I by its treatment of the design (Grenet *et al.* 2007), also shows the penetration of Sasanian forces into Kushan territory.

Apart from these rock-cut evidences there are also some scratched inscriptions in a cave at the site of Kara Tepe near Termez which mention the names Hormizd and Varahran (Livshits 1969, 77, 81) and it has been suggested, without much basis, that these refer to the Kushanshahs (Harmatta 1974). Varahran is also named as Kushanshah in one of the Bactrian leather documents (Sims-Williams 2007, 52–3).

The other evidence for Sasanian rule comes from the coins of the rulers called Kushano-Sasanian in modern scholarship. The sequence of coins presented in the catalogue shows seven Sasanian rulers using the title Kushanshah: Ardashir I, Ardashir II, Peroz I, Hormizd I, Hormizd II, Peroz II and Varahran. Kushano-Sasanian coins were also issued with the portrait and name of the Sasanian emperor Shapur II (AD 309–79).

The relationship between the Sasanian empire and the Kushano-Sasanian kings appears to be like that described in the inscriptions of Shapur I and Narseh, where members of the royal family are sent to conquered kingdoms to rule them on behalf of the Sasanian emperor. There is no explicit mention of the Kushano-Sasanian kingship in these inscriptions, but the likelihood that the Kushanshahs Ardashir I and Peroz I were sons of emperor Ardashir I and therefore brothers of Shapur I, that Hormizd I Kushanshah was the brother of emperor Bahram II and that Hormizd II Kushanshah was the son of Narseh suggests that the same system applied.

R. Ardashir I, *c.* AD 230–5

Ardashir, the first name to appear on Kushano-Sasanian coins, is titled Kushanshah (*kws'n MLKA*) and Mervshah (*mrwy MLKA*). This identifies him as the Ardashir king of Merv, named in Shapur I's Kaʿba-ye Zardošt inscription, 4.6b (Huyse 1999, vol. 1, 54; Sprengling 1953, 18, 76): *'rtxštr mrgv MLKA* (line 23); ΑΡΤΑΞΑΡΟΥ ΜΑΡΟΥ ΒΑΣΙΛΕΩΣ (line 55). Ardashir Mervshah is described as a subordinate of Ardashir I, the founder of the Sasanian dynasty and according to the Kaʿba-ye Zardošt inscription there is no mention of him or any other Mervshah as active under Shapur I, so he can be dated to between AD 223 and 240, by the dates of the emperor Ardashir I, or between AD 226/7 or 233 and 240 on the basis of the likely date of Merv and then part of Kushan territory coming under Sasanian rule (Alram 2007, 232–3). If the reading of the coins is correct, then this Ardashir is probably the son of the emperor Ardashir I. His coins (R.C1) show the Iranian goddess Anahita presenting him with a Kushan headdress in a typical Sasanian investiture scene, probably signifying his accession to the Kushan throne.

S. Ardashir II, *c.* AD 235–45

The second Ardashir is distinguished from the first by his crown and by his use of only the Kushanshah title. It cannot be ruled out that the two Ardashirs are in reality the same person, with the changes of crown and title representing conventional changes rather than the accession of a new king. The next king Peroz seems to have been represented with three different crowns, so it is possible that the Sasanian convention of distinguishing reigns by a change of crown did not apply as rigorously to the Kushanshahs. The second Ardashir's coins also show him receiving a diadem, on one type from Anahita (S.C1), and on the other from Mithra (S.G1, S.C2). The coins show the king and gods in Sasanian guise, but the overall reverse designs reflect Kushan coin design, where a labelled god presenting a diadem was the standard. On the second type (S.G1, S.C2) the king is shown on the obverse in the same posture as the Kushan kings on their coins.

T. Peroz I, *c.* AD 245–70

The third Kushano-Sasanian Kushanshah Peroz I overstruck coins of the second Sasanian emperor Shapur I (*c.* AD 240–70). He is also the first Kushano-Sasanian to issue coins south of the Hindu Kush, the area claimed by Shapur I in the Kaʿba-ye Zardošt inscription 'as far as Peshawar'. It has been suggested that Peroz I was Shapur I's brother as mentioned in accounts of the life of Mani (Sundermann 1986, 14; Scott 2007, 108); this is plausible, but not necessary for understanding the construction of Kushano-Sasanian history. Sundermann rightly rejects the idea that Mani met Peroz while in India, as his reign as Kushanshah is likely to begin later than Mani's visit to western India, *c.* AD 240–2. Mani's encounter with Peroz, the brother of Shapur I, seems to have taken place in Iran when he returned from India. If Peroz I Kushanshah is this

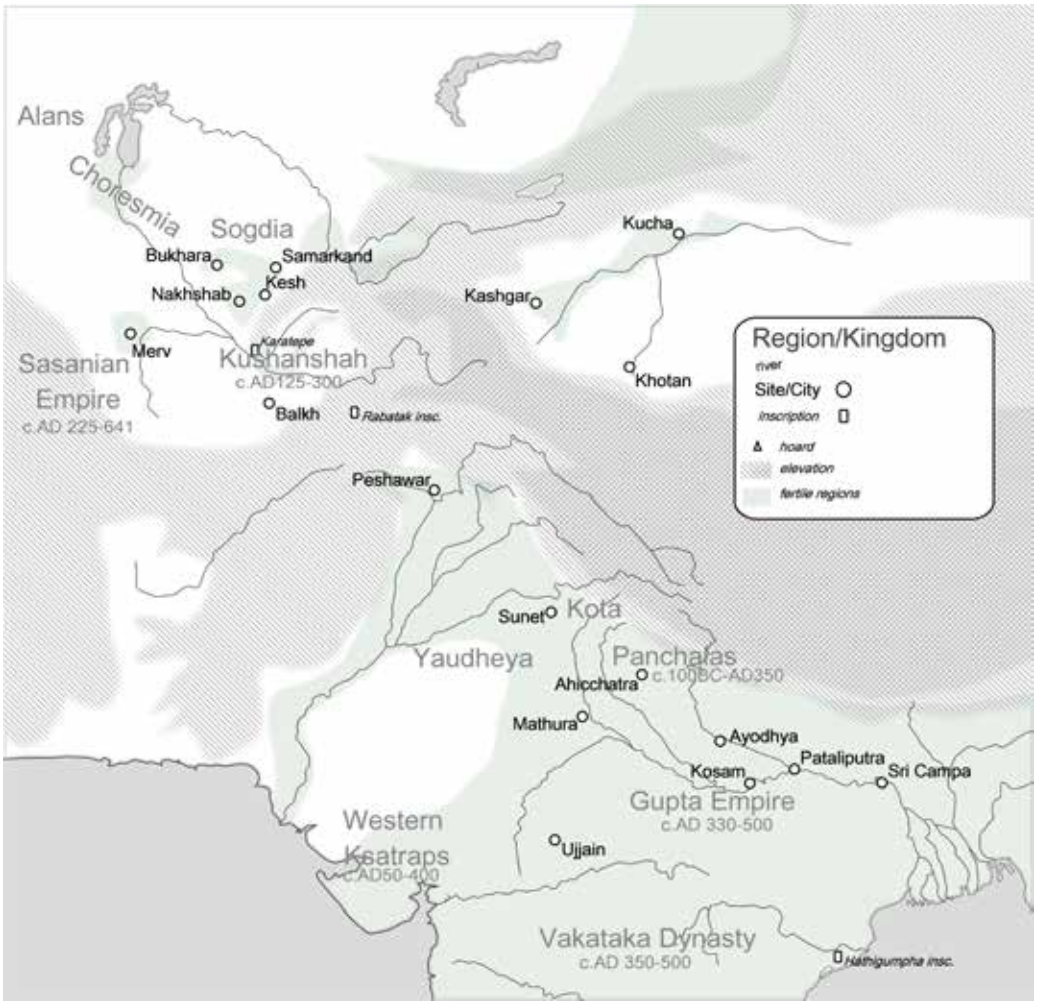


Figure 2.56 Map of Central and South Asia in the period of the Sasanian Kushanshahs and the Kidarite Huns (*c.* AD 230–350)

Peroz, brother of Shapur I, then his reign will not have begun until after his encounter with Mani *c.* AD 242. Peroz I's coinage began as adaptations of the imitation Kushan coinage issued during early Sasanian rule in Bactria/Tokharistan. It developed a more Sasanian identity as the reign progressed. South of the Hindu Kush he issued gold coins (T.G2-i) based on the issues of Kanishka II and Vasishka, and copper coins (T.C2-i) featuring the fire altar/throne design used by Ardashir I (but without the lowest mushroom-shaped elements). This copper coinage began the only use of the fire altar/throne design from when it stopped being used at end of the reign of emperor Ardashir I, *c.* AD 240 until about AD 320 when it was reintroduced on Sasanian coins in the reign of Shapur II (AD 309–79) (Schindel 2004, 219). The fire altar/throne was given a Kushan aspect under Peroz I, as the bust of a labelled god was added into the flames of the fire altar: Kushan Nana ΒΑΓΑ ΝΑΝΑ or Kushan Oesho ΒΑΓΟ ΒΟΡΖΑΟΑΝΔΟ High God 'the god who possesses the heights' (Grenet 2015, 224). This innovation continued until the end of Kushano-Sasanian rule south of the Hindu Kush, and was featured on some of Shapur II's coins for this region. The placing of a deity in the flames of a fire altar was later adopted by the Sasanians for their own coins from the time of Sasanian emperor Hormizd II (AD 303–9). The borrowing of this Kushano-Sasanian imagery by the Sasanian mints may be related to the possibility that the Sasanian emperor Hormizd II earlier ruled as the Kushano-Sasanian Hormizd II (see below). Examples of Peroz I's southern copper coins have been found overstruck by coins of the Kushan king Vasudeva II (J.C1-i) whose reign began *c.* AD 267.

U. Hormizd I, *c.* AD 270–300

The fourth Kushano-Sasanian Kushanshah Hormizd I continued to use one of the crowns adopted by his predecessor, the lion-head crown. The crown is in keeping with early Sasanian practice, where an animal head could be used as the identifier of the king wearing it. The use of a lion head as part of a headdress was also used as an identifying feature in representations of the Greek god Heracles, as well as Iranian depictions of Verathregna and Buddhist images of Vajrapani in Gandharan sculpture. About the same period as Hormizd I, the lion-skin headdress is also worn by the Roman emperors Constantius (AD 293–306) and Maximinus (AD 306–7) on their coins, again a symbolic link with Roman Hercules.

Hormizd I's copper coins (U.C2-iii) are found extensively overstruck by coins of the Kushan emperor Vasudeva II (J. C1-ii) suggesting that they were contemporaries and that Vasudeva II's administration got hold of a large quantity of Hormizd I's coins, perhaps as a consequence of conflict between the Kushanshah and the Kushan emperor over territory in Gandhara. A hoard consisting mostly of overstriking Vasudeva II's coins purchased at Akhun Dheri, near the site of Charsadda in central Gandhara, suggests that the Kushan emperor may have been pushing the

Sasanians back from their territory (Ali *et al.* 2004, nos 6173–6205, 6013, 6014, 6152, 6155 and 6156; Göbl 1984, 87). A second hoard found during excavations further east, on the eastern boundary of the Gandhara plain, at Aziz Dheri (the Gangudher site near Gohati) also supports this conclusion (Khan 2008b). The hoard, consisting of 519 copper coins, contained a mixture of Kushano-Sasanian coins of Peroz I (T.C2-ii x53), Hormizd I (Kavad type U.C2-iii x189), illegible (x15), imitation Kushan coins (Kanishka II type G-imit C1–2 x10; Vasudeva type, F-imit C1–5 x213) and official coins of Vasudeva II (standing king type (J.C1-i) x3, seated king type (J.C.1-ii) x33), of which most (x26) were overstruck on coins of Hormizd I. The latest coin in the hoard was a coin of the type attributed here to Shaka (L. C1-i, example E).

The weakening of the Kushanshah's south-eastern borders could have resulted from Hormizd I's activities in the north-west where he seems to have taken territory from the Sasanian emperor in Margiana (southern Turkmenistan), as he issued gold and silver coins with the mint name Merv, the main city in that region. After the reign of Ardashir Mervshah (Ardashir I Kushanshah), during the reign of the Sasanian emperor Ardashir I, the Sasanians seem to have taken direct control of Merv as they started issuing imperial coins there late in Ardashir I's reign and under Shapur I (Alram and Gyselen 2003, 35, 146, 277, 279) and his successors (Alram and Gyselen 2012, 21–3). The Merv coins of Hormizd I Kushanshah (U.G3-i, U.S1-i) give the king imperial titles, mimicking the official Sasanian emperor's titles in Pahlavi *mzdysn bgy 'whrmzdy RBA kwš'n MLKAn MLKA* (the Mazda-worshipping Hormizd great Kushan king of kings). The title 'king of kings' is also found on some coins from his Balkh gold and copper mints (U.G1-iii, U.C1-iv) and his southern gold mint (U.G2-ii): Bactrian ΚΟΡΑΝΟ ÞΑΥΟΝΟ ÞΑΥΟ; Pahlavi *kwš'n MLKAn MLKA*. This is the only time a Kushanshah used this title, and from the sequence of the coins at the Balkh mints, it appears to be about half the way through his reign (*c.* AD 270–300), after which he reverted to the simple royal title.

Bivar (1979, 324–7) suggested that the adoption of this title by Hormizd I represented his revolt against the Sasanian emperor Bahram II, and referred to passages in the *Historia Augusta* (*Carus* 8.1: Magie and Ballou 1932, 428–9) and the *Panegyrici Latini* (11.17.2: Nixon and Rodgers 2015, 541). The account of Carus and his fellow emperors refers to a conflict within the Sasanian empire: 'occupatisque Persis domestica seditione' [the Persians being occupied by internal insurrection], which gave Carus (AD 282–3) the opportunity to conquer a large part of Sasanian territory. The Panygeric, dated *c.* AD 291, seems to refer to the same event within a series of random statements about the state of affairs around the Roman empire:

> Ipsos Persas ipsumque regem adscitis Sacis et Rufiis et Gelis petit frater Ormies nec respicit vel pro maiestate quasi regem vel pro pietate quasi fratrem [His younger brother Hormizd, allied with the Saci, Rufii and Geli, had no respect for the Persians or their king, either for him as king because of his majesty or as brother because of piety].

The chronology for Hormizd I's adoption of imperial titles constructed here (reflecting the relationship between Hormizd I Kushanshah and his contemporary Vasudeva II and placing Hormizd I immediately after Peroz I, the contemporary of the Sasanian emperor Shapur I) is compatible with placing the Roman accounts of a conflict within the Sasanian empire under Bahram II (AD 276–93), involving his brother Hormizd. In the Naqš-e Rustam relief of Bahram II he is accompanied by a series of princes, one of whom wears a lion-head crown, with the diadem ties of royalty, perhaps Hormizd I Kushanshah at a time when he was not in conflict with his brother and claiming full imperial titles.

The graffiti at Kara Tepe (Livshits 1969, 77–81) which it is claimed refer to kings Peroz, Hormizd and Varahran (Harmatta 1974), cannot be treated as firm evidence as the reading and interpretation of these inscriptions is very problematic (Davary 1982, 75–81). None of these names, if the imaginative readings are correct, are directly linked with the title Kushanshah in the inscriptions, so it is likely that they are the names of non-royal persons. The inscriptions also include some dates: years 35 and 97 (Davary 1982, no. IKTB 10; nos IKTB 5+9), but not in the graffiti said to mention the kings. Year 35 would equal AD 257/8 and year 97 AD 319/20 (Sims-Williams and de Blois 2018, 16), i.e. dates in the reigns of Peroz I and Peroz II. If these dates were in centuries of the Kushan era, then they could be dated four years later (see §R–Y.2 below), or even 104 years later.

V. Hormizd II, *c.* AD 300–3

Hormizd II's coinage is scarce suggesting that his reign was brief. The similarity of his crown with bird wings and his chronological position in the Kushano-Sasanian sequence creates the possibility that he is the son of the Sasanian emperor Narseh and succeeded his father as Hormizd II. The coins of Sasanian emperor Hormizd II are the first to feature a design borrowed from Kushano-Sasanian coins: the representation of a deity in the flames of the fire altar on the reverse. This can be most easily explained if the king had such a direct connection with the Kushano-Sasanian realm. A much later source, the *Rauzat us-Safa* (2.1: Rehatsek 1892, 340), refers to the Sasanian emperor Hormizd II being married to the daughter of a king of Kabul, presumably the daughter of his predecessor Hormizd I Kushanshah (Carter 1985, 252).

W. Peroz II, *c.* AD 303–30

No historical information can be connected with Peroz II. He was the last Sasanian Kushanshah to rule north and south of the Hindu Kush. The length of his reign can only be guessed at from the volume of his coinage, which exceeds that of his predecessor, but is less than that of Hormizd I. He was succeeded north of the Hindu Kush by Varahran and south of the Hindu Kush by issues of the Sasanian emperor Shapur II.

X. Varahran, *c.* AD 330–59

Varahran is the last Kushano-Sasanian king. He is the only one named in a contemporary document, in Bactrian document **ba** (Sims-Williams 2007, 52–3). During his reign the territory which had formerly been the southern part of

Kushanshah territory seems to have come under direct Sasanian rule as the coins issued there were in the name of the Sasanian emperor Shapur II (AD 309–79). After preliminary issues (Y.G1-i, -ii), the gold coins of Varahran had a tamga added to their design (Y-O.G1-i) in place of the nandipada which had featured on all previous Kushano-Sasanian gold coins from the Balkh gold mint. The tamga is associated with Kidarite copper issues made in Gandhara (Khan *et al.* 2008, 107–8, nos 196–207; Cribb 2010, 145, no. 67; Vondrovec 2014, 82–6, type GC-K3), and therefore can be considered as indicating a Kidarite Hun presence in Varahran's realm.

Two explanations of the meaning of the tamga can be considered. One is that the tamga represents the Kidarite Huns replacing Varahran, but retaining his coin designs and inscriptions in order to facilitate the continued use of the coins in currency. The other is that Varahran continued to rule in a nominal way, but the Kidarite Huns were the real power in Bactria/Tokharistan. The latter is more likely as the Kidarite authorities in Gandhara also continued to use the name of Varahran on their coins. The Bactrian coins in the name of Varahran underwent various other changes in design which were also reflected in Kidarite coins issued in Gandhara. The changes were in the form of the crown worn by the royal image on the Balkh gold and copper mint coins. In Gandhara two of these new crowns can be associated with the names of Kidarite Hun rulers: the ram's horn crown with Peroz and the flat crown with raised ribbons with Kidara. The raised ribbon crown also appears on a royal bust on three sealings found in Swat (ur Rahman *et al.* 2006; Lerner and Sims-Williams 2011, 72–4, nos AA 2.1, 2.2 and 2.3), which are inscribed in Bactrian ΥΟΝΑΝΟ ϸΑΟ ΟΑΖΑΡΚΟ ΚΟϸΑΝΟ ϸΑΟ, i.e. the bust is of a king who is both 'king of the Huns' and 'great Kushan king'. A similar bust with the same crown, and the typical Kidarite front-facing posture, also appears on an uninscribed sealing, again collected in Pakistan (ur Rahman and Falk 2011, 39, no. 01.02.26). The Balkh gold mint issues with the name of Varahran are followed by issues in the name of the Kidarite Hun king Kidara wearing the same raised ribbon crown and adopting the title Kushanshah. It seems likely that initially the Huns were content to acknowledge Varahran Kushanshah while introducing their own tamga and imagery on the coins until at some point Kidara took over from him the Kushanshah title, perhaps on Varahran's death.

Y. Shapur II, Sasanian emperor AD 309–79

The assertion of quasi-autonomy by the Kidarite Huns under the nominal kingship of Kushanshah Varahran suggests the cause of Shapur II taking direct control of the southern part of the Kushano-Sasanian state, establishing direct Sasanian rule in the Kabul valley.

It is not clear when in Shapur II's reign his control of the Kabul region took place, but it had already been established by the mid-350s when the Roman historian Ammianus Marcellinus reported that Shapur II 'in extremis regni limitibus suorum sanguine fuso multiplici aegre propulsare gentes infestas' ('on the remotest frontiers of his realm, was with difficulty and with great bloodshed of his troops driving back hostile tribesmen') (16.9.3–4: Rolfe 1935, 240–1) and that he was actually busy in the territory occupied by the Kidarite Huns 'Chionitas et Eusenos …, in quorum confiniis agebat hiemem Sapor' ('Chionitae and Euseni, within whose borders Shapur was overwintering') (*Eusenos* has been emended to *Cusenos*, i.e. Kushans, by Marquart 1901, 26). By AD 358 Ammianus (17.5.1: Rolfe 1935, 332–3) was able to report that Shapur II had made a treaty with the Kidarite Huns, but that he was still based in the east: 'rex Persarum in confiniis agens adhuc gentium extimarum, iamque cum Chionitis … pignore icto societatis …' [the king of the Persians, still active within the boundaries of very distant peoples, having now struck a pledge of alliance with the Chionitae].

The treaty with the Kidarite Huns also involved a military alliance as in AD 359 Ammianus (18.6.20: Rolfe 1935, 446–7) described the Hun king Grumbates fighting alongside Shapur II at the siege of Amida: 'Quem iuxta laevus incedebat Grumbates Chionitarum rex novus' ('On his left was marching Grumbates, the new king of the Chionitae') and in the battle Grumbates served Shapur II well (19.1.7: Rolfe 1935, 472–3). 'Ideoque cum prima lux advenisset, rex Chionitarum Grumbates fidenter suam operam navaturus tendebat' ('and so, at dawn, Grumbates, king of the Chionitae, boldly set about his task with zeal'), and in spite of his son being killed was at the forefront of the fighting (19.2.1–4: Rolfe 1935, 476–7).

The events described by Ammianus when aligned with the chronology created by the numismatic sequence suggest the period when Kidara had finally asserted himself as Kushanshah, therefore 'rex novus', as the earlier Kidarites do not use the title 'king' on their coins in Bactria. The name of king Grumbates does not resemble Kidara in any way and there are no Kidarite kings or other names on the coins which resemble Grumbates, so it is difficult to explain the name given for the Kidarite king in Ammianus. Two Bactrian documents (Sims-Williams 2007, 106–7, 110–11, nos **dg** and **eb**) do provide examples of the name being used of a local ruler in Bactria/Tokharistan, spelt in Bactrian ΓΟΡΑΜΒΑΔΟ, but in a later context, dated *c.* AD 465 (Sims-Williams 2002, 232–3; 2008, 93; Sims-Williams and de Blois 2018, 71–2); one of the people named in **eb** is also mentioned in document **ea** (Sims-Williams 2007, 108–9) which is dated (Bactrian era) year 239 (Sims-Williams and de Blois 2018, 32, 122, date it to AD 461, but see §Y–Z.1 below).

It has been suggested that Grumbates could be the Kidarite Hun ruler Peroz who preceded Kidara (Bivar 1979) and that Grumbates was mistaken for Shapur II by Ammianus, because he described Shapur II wearing a ram's head crown (19.1.3) and being acclaimed by his army: 'Persis Saporem saansaan appellantibus et pirosen, quod rex regibus imperans et bellorum victor interpretatur' (19.2.11: Rolfe 1935, 480–1) [the Persians calling Shapur 'saansaan' and 'pirosen', which mean 'king over kings' and 'winner of wars']. This seems less likely as Ammianus was an eyewitness to these events and describes the procession of Shapur II wearing the ram's head crown before his army, surrounded by courtiers, and the acclamation of Shapur as emperor, 'king over kings', would not apply to the Kidarite king who in this context would not be acclaimed by such a high title, and the Kidarite rulers never used it on their coins.

The issue of coins with the image and name of Shapur II in the former Kushano-Sasanian territory appears to be more extensive than suggested by the few years he can be located, according to Ammianus, in the territory where the coins were issued. The silver coinage associated with the Kabul region is very large (representing almost two-thirds of the coins in the collections covered by the study by Schindel 2004, vol. 1, 232–8; vol. 2, nos 103–292). Schindel (2005, 234) concludes that the series he associates with the Kabul region dates from the 320s ('die Umstellung von 1b auf 2a und dann auf 3a scheint mir in die 320er Jahre zu fallen, wobei freilich auch dies nur ein Annäherungswert ist'). In his study of Shapur II's coinage, however, he asserts that the coinage was initially issued at Ctesiphon for about 40 years before its production moved to Kabul *c.* AD 365 (Schindel 2004, vol. 1, 236), but his argument is based on the unprovable assertion that copper coins issued in the west (probably at Ctesiphon) *c.* AD 364 dictate the allocation of the whole of this mint's production. Shapur II's Kushano-Sasanian style copper coinage is of a similar size to his Kabul mint silver production, with the majority (X.C1-i, -ii) struck at the same mint as the Kushano-Sasanian southern coinage. A separate series of copper coins also seems to have been struck at Taxila, as a large group were found in the excavations (Marshall 1951, 823). The issue of silver coins by his successors Ardashir II (Schindel 2004, vol. 1, 256–7) and Shapur III (*ibid.*, 273–4) in the same location suggests that Shapur II continued to control the Kabul region until the end of his reign. When these Kushano-Sasanian style coinages began is less clear, but their beginning coincides with the end of the reign of Kushanshah Peroz II, as he is the last Kushano-Sasanian king to issue coins in the southern territory taken over by Shapur II. On the basis of Schindel's dating of the Kabul series from the 320s it seems reasonable to date the establishment of Shapur II's direct administration in the Kabul region *c.* AD 330.

The presence of Shapur II's administration in former Kushano-Sasanian territory also fed back into coin design at his Merv mint, where copper coins were issued copying the reverse design of the Kushano-Sasanian Balkh mint coppers with a deity figure emerging from the top of a fire altar (Loginov and Nikitin 1993b, 251, group 5; Schindel 2004, vol. 1, 215, type 4). The issue seems to coincide in time with Shapur II's Kushano-Sasanian style coinage and Sasanian silver drachms being issued in former Kushano-Sasanian territory south of the Hindu Kush, as it is preceded by Merv copper coins with regular Sasanian reverse designs (Loginov and Nikitin 1993b, 249–50, groups 1, 3 and 4).

The testimony of Faustus (P'awstos), the historian of Armenia, confirms the necessity for Shapur II's administration to continue controlling the Kabul region, as he records (P'awstos Buzandac'i, *History of the Armenians* 5.7 and 5.37: Bedrosian 1985, 227–8 and 260) continuing conflict between Shapur II and the Kushans at Balkh, *c.* AD 369 and 375 (these dates are estimated by the association of these events with the sequence of Armenian kings Arsak II, *c.* AD 350–70, and Varazdart, *c.* AD 374–377/8; Blockley 1987). The coin sequence shows that the only ruler taking the title Kushanshah based in Balkh contemporary with the later part of Shapur II's reign is Kidara, so the reference to Kushans undoubtedly is a reference to the Kidarite Hun Kushanshah. In spite of the initial co-operation of Kidara with Shapur II at the siege of Amida, he quickly asserted his power by going to war with Shapur II and inflicting two defeats on Shapur II's army, described by Faustus (5.7 and 5.37).

R–Y.2 Kushano-Sasanians: problems of chronology

The dating of the Kushano-Sasanian kings proposed here is based on their relationships with the Kushan kings through overstrikes, mint locations and hoarding. This chronology has been questioned in many ways and a later start for the Kushano-Sasanian state has been proposed by some scholars. Göbl (1999, 162) reiterated his dating of the foundation of the Kushano-Sasanian state to *c.* AD 350 in the reign of Shapur II and had earlier (1984, 85) dated its end to *c.* AD 388 in the reign of Shapur III (AD 383–8). Such a brief period for such an extensive coinage issued by at least six kings seems a curious proposal. This chronology was constructed by him around his dating of the era of Kanishka I to *c.* AD 230 (1999, 163), so that the beginning of the Kushano-Sasanian state commenced just over one hundred years after Kanishka I's accession and therefore in the reign of Kanishka II. There can be no doubt on the basis of the overstrikes etc. that the Kushano-Sasanian kingdom pushed the Kushans back as far as Peshawar in the reign of Vasishka, but this event took place under Shapur I, as is attested by the Ka'ba-ye Zardošt inscription (Huyse 1999, 24 and 36). There is therefore a contradiction between Göbl's assertion and the evidence of the coins and a contemporary inscription. Göbl argued that the claim over Kushan territory in the Ka'ba-ye Zardošt inscription was a lie, and rejects the interpretation of al-Tabari's account of Ardashir I's campaign into Kushan territory, rather than consider it as evidence of Sasanian penetration into Kushan territory (Göbl 1993a, 51–5).

The chronology proposed by Göbl has been revived by Schindel (2011), with a slightly different start date for Kanishka in AD 227, but has moved the start of the Kushano-Sasanian coinage to an earlier date, placing the coins of Ardashir I (R.C1-i; his Ardashir 2; Göbl 1984, type 1029) and Ardashir II (S.C1-i; his Ardashir 1; Göbl 1984, type 1028) in the 280s and asserted that they 'cannot be earlier than 272, and certainly not later than ca. AD 300' (Schindel 2012, 72). Part of his argument is that these Kushano-Sasanian coins show the king wearing an earring and this does not appear in Sasanian coinage until the issues of Hormizd I (AD 272–3). He also saw a parallel between the control marks before the face on the coins of Ardashir II (S. C1-i) and the mint mark for Merv before the face on coins of Bahram II (Alram and Gyselen 2012, pl. 23, types A73 and A74). The argument about earrings rests on the false premises that coin design is the only source of artistic conventions and that the Kushano-Sasanian coin engravers were not capable of innovation. The control marks on Ardashir II's coins are in the same position as the mint marks on Bahram II's Merv mint coins, but Schindel is wrong to read one of the control marks as the first two Pahlavi letters (*mr*) of Merv (reiterating the opinion of Carter 1985, 225), as they are of a different shape to these Pahlavi

letters at this period and the range of other marks in the same position on Ardashir II's coins makes a Pahlavi mint mark unlikely. The reverses of these coins have perfectly well-formed Pahlavi letters *m* and *r* in the word *MROTA*, showing that the die engraver did not intend to write these letters in the obverse control mark. Most of the other arguments presented by Schindel relate to design details, like the earring, arguing that the Kushano-Sasanian die engravers could only work by following Sasanian prototypes (2005, 219–31). In reality the die engravers at the Kushano-Sasanian mints were innovators and created many new designs without Sasanian parallels, so their use of design features such as earrings, altar ties, diadem bands, crown types etc. cannot be dated simply by their relationships with Sasanian coins in such a specific way. The links between Kushano-Sasanian and Sasanian coin designs place them broadly within the period from the reign of Ardashir I to the end of the reign of Shapur II, rather than as Schindel suggests between *c.* AD 290 and 325 on the basis of the relationship between Hormizd I Kushanshah and the Sasanian emperor Hormizd II (AD 303–9):

> Die Periode von ca.290–ca.325 kann aufgrund der numismatischen Evidenzals Dauerder KS Prägungen für gesichert gelten … Da nun Ohrmazd I durch die Morphologie seiner Krone eindeutig mit dem Großkönig Ohrmazd II. verbunden ist, scheint es mir am wahrscheinlichsten, daß Ohrmazd I Kushanshah in die Regierungszeit seines großköniglichen Namensvetters gehört und somit der Beginn der KS-Ausgaben – mit der einzigen möglichen Aus- nahme des Ardashir I – erst ab 303 zu datieren ist. Damit würde sich die Prägedauer noch um ein paar Jahre verkürzen lassen, auf ca. 303 bis ca. 325 [According to the numismatic evidence, the period of *c.* 290–325 can be considered as certain for the duration of the Kushano-Sasanian coinage … Since Ohrmazd I is now clearly connected with the great king Ohrmazd II through the form of his crown, then Ohrmazd I Kushanshah belongs to the reign of his grand-royal namesake and thus the beginning of the Kushano-Sasanian issues – with the only possible exception of Ardashir I – can only be dated from 303. This would shorten the minting time by a few more years: from *c.* 303 to *c.* 325] (Schindel 2005, 236).

Schindel's dating of the early Kushano-Sasanian coinage and therefore of Peroz I Kushanshah's issue of coins south of the Hindu Kush soon after places these issues contemporary with Huvishka and Vasudeva in his chronology and he has so argued elsewhere (Schindel 2009; 2014). His argument for equating Ardashir I (R.C1-i; his Ardashir 2) with the period of Huvishka is based on the crown offered by the goddess Anahita to the king on the reverse (2009). He identifies the crown as that of Huvishka, with various modifications due to scale, and dates the Ardashir coin to the middle of Huvishka's reign which he dates to AD 253–91, therefore *c.* AD 272. His equation of a type of Ardashir II (S.C2-i; Göbl 1984, type 1114, his strange Ardashir 'seltsamen Ardashir', Schindel 2005, 236) with the reign of Vasudeva I also rests on a detail of design (Schindel 2014). He argued that the detail of the fire altar on which the king makes an offering on the obverse of this type can only be found on Kushan coins from the time of Vasudeva I. The detail he refers to as flames are in reality raised corners on the altar (Ingholt and Lyons 1957, 166, g. 432 shows a relief from the Kalawan site, Taxila, featuring a fire altar with such corner projections and flames, attended by a Brahmin) (Cribb 2018a, 24). The fire altar on the Ardashir II coin is of a different form (with a tripartite shaft and ball-shaped top, and, on some dies, bottom of the shaft is also ball-shaped) to all such altars on both Kushan and Kushano-Sasanian coins, so was unlikely to conform to broader trends in the details of coin design. His analysis again led him to place this coin type into the period of Huvishka. The currency of Kushano-Sasanian coins in Bactria during the reigns of Huvishka and Vasudeva I is incompatible with the continuing production and currency of Kushan coins north of the Hindu Kush during their reigns. This chronology demands that the early Kushano-Sasanian kings and the Kushan emperors ruled in the same place at the same time. It also demands the movement of the Kushan kings before Kanishka I into the decades just before AD 227, whereas the evidence from the Chinese chronicles, the links between their coins and Indo-Parthian and Indo-Scythian issues and the inscriptions of Kujula Kadphises in the Azes era and those of Wima Takto and Wima Kadphises in the Greek era position them a hundred years earlier (Cribb 2018a). The proposed later chronology for the Kushano-Sasanian coinage places outside its true context the coinage linking Kidara and Samudragupta (Q.G3-i), which must be dated before the end of Samudragupta's reign *c.* AD 380 and after Kidara's succession to Varahran Kushanshah, a contemporary of Shapur II. All this renders implausible Schindel's demand to squash the Kushano-Sasanian coinage into an implausibly brief period from *c.* AD 290 to 325 (Schindel 2005). He has since changed his mind slightly: 'nowadays I prefer a slightly later date in the reign of Šāpūr II' and places what he terms the earlier group (i.e. Ardashir I and II) in the 280s. He also presents a more detailed approximate timetable of the Kushano-Sasanian rulers, placing Peroz I (T.G1 etc.) and Hormizd I (U.G1 etc.) as contemporaries from *c.* AD 300 succeeded by Hormizd II (V.G1 etc.) 'after 309' and the Kidarite issues in the name of Varahran (Y-O.G1, Y-P.G1 and Y-Q.G1) *c.* AD 330 (Schindel 2016).

An alternative dating of the Kushano-Sasanian coinage was also proposed by Nikitin (1999) moving all the coinage and its issuers into the 4th century, from the reign of the Sasanian emperor Hormizd II (AD 303–9) until the end of the 4th century (1999, 261). He argued that the Kushanshah mentioned in Narseh's inscription (Skjærvø 1983, 70; Falk 2015a, 132) was a Kushan and not a Kushano-Sasanian ruler (Nikitin 1999, 260). The rationale for his redating was his reading of *bhly* as the mint name Balkh on a silver drachm issued in the name of the Sasanian emperor Bahram I (273–6) (1999, 263, no. 2). The same specimen (Gorny and Mosch, 7 March 2016, auction 236, lot 299; 10 October 2016, auction 240, lot 286) and a copper coin with the same mark (Gorny and Mosch, 7 March 2016, auction 237, lot 1532; 10 October 2016, auction 241, lot 1631) were auctioned in 2016. There is no reason to question the interpretation of the mint name, but it should be read as *blky*. Nikitin argued that the Balkh coins represented the first evidence of conquest of Kushan territory by the Sasanians, confirming Shapur I's claim to control Kushan territory, and that the Sasanian emperors directly ruled in former Kushan territory until the first

decade of the 4th century. He is saying that only after this point would the territory pass under the control of the Kushanshahs. However, such a late dating of the Kushanshah issues creates all of the same chronological problems as for Göbl and Schindel's reconstructions. The Kushan emperor Vasudeva II restrikes Kushanshah issues and even the most generous length for his reign which begins in or before AD 267 (see §J.2 above) would not have him ruling long enough into the 4th century. The most likely explanation is that the issue of Sasanian imperial coins at Balkh does not preclude the issue of Kushanshah coins from the same location, but that they have different monetary or political purposes. It seems likely that the Kushanshahs, though administratively independent, were still subject to the Sasanian emperor and fell within the ambit of the Sasanian court as a result of the close family relationships which were maintained, and that therefore such an issue either for an overlord, or in many cases elder brother or father alongside their own issues demands no special explanation.

Nikitin's view that there were no Sasanian Kushanshahs until after Bahram I's Balkh coins and that Balkh was directly ruled by the Sasanian emperors has become part of the general discourse on this period (Grenet *et al.* 2007, 258). Although Grenet accepted that Bactria/Tokharistan had been conquered already under Ardashir I, he accordingly placed the 'second phase of expansion' and the initiation of 'the Kushano-Sasanian gold and bronze series' under Peroz I Kushanshah in the '280s or 290s' (Grenet *et al.* 2007, 259). This solution ignores the coin issues of Ardashir I and II and early issues of Peroz I himself which precede those relating to his extension of Kushano-Sasanian coinage and accordingly Kushano-Sasanian power south of the Hindu Kush. Grenet (*ibid.*, 259–60, n. 16) compared the gold issue of Peroz I (T.G2-i) with the coins of Vasudeva II (J.G1-i and -ii), suggesting that Peroz I came to power in the reign of Vasudeva II, whom he dated 'from the 280s'. The dating here for Vasudeva II initiates his reign *c.* AD 267, a direct successor of Vasishka. It can also be said that the prototype for Peroz I's coinage is more likely the early issues of Kanishka II (G.G1-i) which are the only Kushan gold coins to have the same crossed horizontal bar and uprights on the back of the throne of Ardochsho (reverse 1a). The analysis in this publication places Peroz I's capture of territory south of the Hindu Kush during the reign of Vasishka (*c.* AD 246–67) when Kushan coinage to the west of Peshawar ceased.

Grenet also proposed that Hormizd I's Merv issues (U. G3-i; U.S1-i) were issued during the minority of Shapur II, i.e. 310s–320s following Carter (1985, 273) and Loginov and Nikitin (1993b, 249–50), all of whom assert that the coins were issued at this date. Carter's view is purely speculative and the main rationale from Loginov and Nikitin is the assertion by Göbl that the same die engraver cut the dies for the Hormizd Kushanshah gold dinar as for a Shapur II gold dinar issued in AD 360–5 (1984, 52, 82), reaffirmed by Schindel (2005, 234–5; 2012, 68–9). There are, however, insufficient grounds to argue that they were the product of the same die engraver. There are similarities in the treatment which suggest the engraver of the dies for Shapur II (AD 309–79) was aware of the coin of Hormizd I Kushanshah, but his work is also based on earlier coins of the Merv mint issued in the name of the Sasanian emperor Hormizd II (AD 303–9), and another Merv dinar of Shapur II was struck with a recut reverse die of Hormizd II (Cribb 1990, 166–7, pl. VI: 61–4). The evidence shows that Hormizd I Kushanshah's reign was earlier than the issue of gold dinars in the name of Shapur II; more than that is speculative.

Carter (1985) also argued for a later date for Peroz I and suggested that he and Ardashir II could only become Kushanshah after AD 262 because there is no mention of them or the office in the Kaʿba-ye Zardošt inscription, even though it asserts Sasanian rule over the territory in which the first Kushano-Sasanian coins were issued. This and the other attempts at creating a chronology for the Kushano-Sasanian kingdom prioritise an interpretation of the historical texts over the framework created by the coins. The textual sources are fragmentary, randomly surviving and never written with the intention of providing an accurate account of the events of this period. The framework created by the coins allows these fragments to be interpreted. The coin framework does not provide all the answers but the interconnections between the Kushans and the Kushano-Sasanians should not be set aside.

R–Y.3 Kushano-Sasanians: royal images

The Kushano-Sasanian kings represent themselves in two ways, either as a head and shoulders portrait bust or standing making an offering at a small altar (**Table 2.14**). The portrait bust types follow Sasanian models, and most of the standing king types follow Kushan ones. Like Sasanian coin portraits the busts use a basic facial type and wear an ornamented tunic and are distinguished by the headdresses they wear, which are similar to those worn by Sasanian kings.

The portrait bust types depart from their Sasanian parallels through the use of ornaments above the headdress, as only a few types have the hair ball which appears on Sasanian coins and in Sasanian reliefs. Most of the headdress ornaments from the reign of Hormizd I onwards are in the form of an artichoke or a striped globe, which may represent a melon (Sara Peterson pers. comm.), and in one case the striped globe ornament is on both of the king's shoulders (W.G1-i, W.G2-i). These ornaments are an innovation of which the meaning is unclear. The tunics are decorated with lines and dots in much the same way as on Sasanian coins, often with bands crossing the chest. The artichoke is perhaps the ornament referred to in the Chinese chronicles *Sui Shu* (83) and *Zhou Shu* (50B) where a king called 波斯 *bosi* (Late Han *pai-sie*, Middle Chinese *pwâ-sje*: Schuessler 2009, no. 18-16, 7-26) is said to wear a golden flower crown (Yu Taishan 2014, 690–1, 840–1). The Chinese name *bosi* is normally used in the chronicles to refer to Sasanian Persia, but in the *Zhou Shu* the reference to king Bosi of the state of Bosi states that he is descended from the Da Yuezhi, suggesting that the reference is actually to a Sasanian Kushanshah, so the golden flower could refer to the artichoke on the Kushanshah's crown (or even a Kidarite Kushanshah's crown) (Tanabe 1997b, 82).

King	Code	Obverse type	Reverse type	Crown	Ornament above crown	Ribbons position	Costume	Shoulders	Halo
Ardashir I	R.C1-i	bust	standing	bird with fish tail	none	crown	court dress		
Ardashir II	S.G1-i S.C2-i S.C2-ii	standing		tripartite crenellated	low hair ball	crown	court dress		
	S.C1-i	bust		tripartite floriate	low hair ball	crown	court dress		
Peroz I	T.G1-i T.C1-i	standing		Kushan	none	crown	armour	flames	halo
	T.G1-ii T.C1-ii	standing		lion head	none		armour		halo
	T.G2-i	standing		flat pearled	dotted hair ball	shoulder	court dress		
	T.G2-i	standing		flat pearled	dotted hair ball	shoulder	court dress		halo
	T.S1-i T.C1-iii T.C2-ii	bust		flat pearled, palmate	none	crown	court dress		
Hormizd I	U.G1-i U.G1-ii U.G1-iii U.G2-i U.G2-ii	standing		lion head	artichoke	crown	armour	flames	halo
	U.G1-iii U.G1-iv	standing		lion head	artichoke	crown	armour	flames	
	U.G3-i	bust		lion head	artichoke	shoulder	court dress		
	U.S1-i U.S2-i U.C1-i U.C1-ii U.C1-iii U.C2-i U.C2-ii U.C2-iii U.C2-iv	bust		lion head	artichoke (some U.C2-iii and -iv are missing the artichoke)	crown	court dress		
	U.G3-i U.S1-i U.S2-i U.C1-ii		standing	lion head	artichoke	shoulder	court dress		
	U.C1-iv U.C1-v	bust		lion head	striped globe	crown	court dress		
Hormizd II	V.G1-i	standing		winged crown	striped globe	crown	armour	flames	
	V.G1-i		standing	winged crown	striped globe	shoulder	court dress		
	V.C1-i V.C1-ii	bust		winged crown	striped globe	crown	court dress		
	V.C2-i	bust		winged crown	striped globe	none	court dress		
Peroz II	W.G1-i W.G2-i	standing		bull-horn crown	striped globe	crown	armour	striped globes	
	W.C1-i W.C2-i	bust		bull-horn crown	striped globe	crown	court dress		
Shapur II	X.C1-i X.C1-ii X.C2-i X.C2-ii	bust		tripartite crenellated	hair ball	crown	court dress		
Varahran	Y.G1-i	standing		flat floriate	artichoke	crown	armour	flames	
	Y.G1-ii	standing		flat petals/dots	artichoke	crown	armour	flames	
	Y.C1-i	bust		flat floriate	artichoke	crown	court dress		
	Y.C1-ii	bust		flat petals/dots	artichoke	crown	court dress		
Varahran + Kirada	Y-O.G1-i	standing		flat floriate	artichoke	crown	armour	flames	
	Y-O.G1-ii	standing		flat petals/line	artichoke	crown	armour	flames	
	Y-O.G1-iii	standing		flat petals/dots	artichoke	crown	armour	flames	
Varahran + Peroz	Y-P.G1-i	standing		ram's horns	artichoke	crown	armour	flames	
	Y-P.C1-i	bust		ram's horns	artichoke	crown	court dress		
Varahran + Kidara	Y-Q.G1-i	standing		flat petals, raised ribbons	striped globe	crown	armour	flames	
	Y-Q.C1-i Y-Q.C2-i	bust		flat petals, raised ribbons	striped globe	crown	court dress		

Table 2.14 Representations of Kushano-Sasanian kings on their coins

The standing figure designs are normally dressed in armour, with a smooth cuirass and plated skirt and the arms and legs are protected by overlapping rings of metal, but a few wear court dress. The depictions of the king in armour are adapted from the coinage of imitation Vasudeva dinars (F-imit.G1-i, -iv) issued in Bactria/Tokharistan in the early Kushano-Sasanian period, with designs ultimately derived from late coins of the reign of Kushan emperor Vasudeva I (F.G1-iv). The depictions are symbolic, so caution should be exercised in assuming they represent actual forms of armour (Bivar 1972; Farrokh 2005; Nicolle 1996). The first adaptation was Peroz I's initial gold issue (T.G1-i), then in his second phase a different armour is represented in which the king appears to wear a smooth cuirass (T.G1-ii). From the Kushan and imitation prototypes two other non-Sasanian features, shoulder flames and halo were retained. The depiction of halos was phased out about midway through the third phase of Hormizd I's gold coinage (U.G1-iii), but shoulder flames remained a feature until the Kidarite period, except on the gold coins of Peroz II where flames were replaced by the striped globe ornament used on crowns (W.G1-i, W.G2-i). The standing king on the obverse of the coins of Ardashir II (S.G1-i, S.C2-i, -ii) and Peroz I (T.G2-i) and on the reverses of coins of Peroz I (T.S1-i), Hormizd I (U.S1-i, U.S2-i) and Hormizd II (V.G1-i) all wear Sasanian court dress with a knee-length tunic over leggings, but exhibit the same posture, making an offering on a small altar, as Kushan kings. The altars have shapes which are different to those appearing on Kushan coins and on the types where the Kushano-Sasanian king wears armour. In two cases (S.C2-i, V.G1-i) the altar takes the form of a bird, which appears to be a raptor. On the gold dinar of the Merv mint issued by Hormizd I (U.G3-i) the standing king in court dress adopts the same posture as on contemporary Sasanian coins of Hormizd I (Alram and Gyselen 2012, 130, types 2a and 2b) and Bahram II (*ibid*., 250–2, types 5a, 5b), where the king stands beside a large fire altar with his right hand raised towards the flames, a gesture towards the deity who stands on the other side of the altar and offers the king a diadem. A similar scene is also featured on the reverse of the copper coin type of Ardashir I (R.C1), but there is no altar.

R–Y.4 Kushano-Sasanians: forms of names and titles

The names of the Sasanian Kushanshahs are typical Sasanian royal names, all of which were used by Sasanian emperors and their families. On the coins they are written in both Pahlavi and Bactrian (**Table 2.15**). There are a few misspellings by careless die engravers, but otherwise the names generally conform to what is expected. The only name which seems intentionally spelt in an unexpected way is the version of the name Peroz with an additional omicron: ΠΙΟΡΩΖΟ.

The royal title Kushanshah appears in both Pahlavi *kwš'n MLKA* and Bactrian ΚΟΦΑΝΟ ΦΑΥΟ on most of their coins, and on a few types of Hormizd I as Kushanshahanshah *kwš'n MLKAn MLKA* and ΚΟΦΑΝΟ ΦΑΥΟΝΟ ΦΑΥΟ, Kushan king of kings. The spelling of the title Shah and Shahanshah are not in the standard Bactrian form used by the Kushans and show Persian influence, representing the Persian pronunciation *š' h* of the ideogram *MLKA* and *š' h'n* of *MLKAn MLKA* (Sims-Williams 2002, 232). A few coin types follow the formula on early Sasanian coins of entitling the king *mzdysn bgy* 'Mazda-worshipping lord' (Alram and Gyselen 2003, 186) or 'Mazda-worshipping god' (*ibid*., 108 or 'divine Mazdayasnian', Skjærvø 2003, 50). The Pahlavi title *bgy* (lord, god or divine) also appears in its Bactrian form as ΒΑΓΟ before the king's name once, early in the series, on a coin type of Ardashir II (S.C2-ii) and later from the reign of Peroz II onwards through into the Kidarite period. It seems unclear whether it should be translated as god, divine or lord. The word is applied to both king and gods, so could be used in either sense. The title 'great' appears before Kushanshah in Pahlavi *RBA* and in Bactrian ΟΟΖΟΡΚΟ on many of the coins. The Bactrian form is, like the royal title, a transcription from Persian *wzwrg*. The same title is rendered for Kushanshah Varahran in Bactrian (Sims-Williams 2007, 52–3) as στοργο κορανοραο, with στοργο and ραο spelt in the same way as the references to Wima Takto in the Dasht-e Nawar inscription and Kanishka I in the Rabatak inscription.

Two names in Bactrian, Kavad ΚΑΒΑΔ and Mēzē ΜΗΖΗ, without royal titles, appear on copper coins of the southern series in the reigns of Kushanshahs Hormizd I, Hormizd II and Peroz II and of Sasanian emperor Shapur II. They never have a title, so it is likely that they are the names of local governors or the officials responsible for coin production. In the reign of Shapur II, after an initial issue with the name Kavad, the king's own name, in Bactrian ΦΑΒΟΡΟ, appears in the same place as Kavad and without the royal title on the coins of both mints (X.C1-ii, X.C2-i) and in Pahlavi *šhpwhry* on the first coins of one of the mints (X.C2-i, obverse 1A). It could be argued that this is not the name of the king, but of a local governor or official with the same name as the king, but this seems less likely.

R–Y.5 Kushano-Sasanians: religious connections

The religious imagery on Kushano-Sasanian coins contains elements of both Kushan and Sasanian practice. Some of their coin inscriptions begin with the phrase *mzdysn bgy*, part of the conventional inscription on early Sasanian coins which identified the king as a *mzdysn* worshipper of Mazda, presumably Ahuramazda, the central deity in Zoroastrianism (Daryaee 2008, 61–2). The word *bgy*, whether interpreted as god/divine or lord also gave the king a religious identity as the word was only otherwise used in referring to gods (*ibid*., 62–4). Kushan kings used similar titles ΒΑΓΟ (divine), and ΗΖΝΟΓΟ (worthy of worship) in both the Dasht-e Nawar inscription of Wima Takto and the Rabatak inscription of Kanishka I and most rulers were referred to as son of the gods (Gandhari *devaputra*, Hybrid Epigraphic Sanskrit *daivaputra* and Bactrian βαγοπουρο), which suggests that their form of the Iranian religion also gave Kushan kings a quasi-divine status. The Kushans were also depicted with divine attributes, such as the flaming shoulders and halo, and on Kushano-Sasanian coins based on Kushan models these features continued to appear. However, they are absent from both Sasanian and Kushano-Sasanian coin designs inspired by Sasanian prototypes. The similarities between the official religions of the Sasanian kings and the Kushan kings made the transition from Kushan to Kushano-Sasanian religious

imagery straightforward. The gods featured on Kushano-Sasanian coins are the 'high god', Anahita, Nana, Mithra and Ardochsho (Sinisi 2015), all, apart from Nana, associated with Zoroastrianism. The coins give no indication of any departure from the Zoroastrianism practised in Sasanian Iran except in so far as they adapt Kushan coin iconography and this is as likely to represent the conservative nature of coin design as any doctrinal differences. Unfortunately, other evidence for religious practice is very thin in the period of the Kushanshahs.

The High God

The 'high god', who is the most frequently depicted on Kushano-Sasanian coins, is named on the coins in Bactrian as ΒΟΡΖΑΟΑΝΔΟ ΒΑΓΟ, ΒΟΡΖΑΟΑΝΔΟ ΙΑΖΑΔΟ or ΟΟΡΖΑΟΑΝΔΟ ΙΑΖΑΔΟ and in Pahlavi as *bwrz'wndy yzdty* (literally 'the god who is on high', 'exalted god', etc.). When he first appears, on the coins of Peroz I (T.G1-i, T.C1-i), he is shown as a reworked version of the Kushan god Oesho, whose name is thought to identify him with a Sogdian god who represents the wind in high places (Humbach 1975; Tanabe 1997a; Cribb 1997a). He retains only the bull, diadem and trident attributes used in the Kushan period and is dressed in Sasanian costume, with tunic over leggings. Like the Kushan god he has a halo, but his hair is drawn like the fire appearing on the Sasanian fire altar coin design. After the initial issue he additionally has hair bunches hanging to the sides, in the same way as in frontal representations of Sasanian kings (T.G1-ii, T.C1-ii, T.C1-iii). Later in the reign of Peroz I, two other images of the god are featured. One shows the god's head and shoulders bust (T.C2-i, reverse 2a), with one raised arm, rising from the flames of a fire altar/throne. The details of the bust are the same as on the coins where he is shown with bull and trident (T.G1-ii, T.C1-ii). Whereas the high god and bull design is a direct adaptation of Kushan labelled deity reverse design, the bust fire altar/throne design seems to be an attempt to combine Kushan and Sasanian reverse designs, joining together the labelled deity with Ardashir I's fire altar/throne design. Contemporary with this design Peroz's silver issue introduces another form of representation of this deity, showing him enthroned (T.S1-i). The enthroned image is only known from a single worn example, but silver coins with the same image from the next reign show all the details (U.S1-i, U.S2-i). The god, identified by his title in Pahlavi, is wearing an ankle-length dress (T.G1-ii) and holding in his left hand a spear in place of the trident. His head is surrounded by flames, he is beardless and he wears a dotted headdress with a crescent mounted on the front. With his right hand he still offers a diadem. This design combines the concept of the obverse and reverse designs on the god and bull coins, by placing in front of the enthroned god an image of the king making an offering at a small altar with his right hand while raising his left hand to acknowledge the god. The same gesture is made by the Sasanian emperor Ardashir I when receiving the diadem of kingship from Ahuramazda in the Firuzabad and Naqš-e Rustam reliefs (Ghirshman 1962, 131–2 pls 167, 168) and (with the right hand) on the coins of Hormizd I (Alram and Gyselen 2012, 128–9, reverse type 2a) and Bahram II (*ibid.*, 250–2, reverse type 5a). The meaning of this coin design and the others is also investiture, showing that the coin issuer does so with the authority invested in him by the gods. On coins issued in the next reign the same design is also featured on copper coins of the Balkh mint (U.C1-ii), replacing an issue with the god and bull design. This is followed by yet another new design which utilises the imagery of the god rising from fire altar used at the southern mint from the issues of Peroz I (T.C2-i, -ii) and continuing into the next reign of Hormizd I (U.C2-i, -ii), but replaces the head and shoulders bust of the god in the god and bull design with the head and shoulders of the enthroned god image. Like the enthroned design the head and shoulders retain the halo of flames, and the crescent headdress, and also hold the diadem and spear. As on the silver coins showing the enthroned figure, the version of the image emerging from the fire altar is also labelled as the 'high god'.

It has been suggested that the enthroned version of the deity and the associated bust from altar image are not the same god as the god with bull because of the different attributes, in spite of the same name 'high god', but it should be compared with a god with head surrounded by flames on the coins of the Sasanian emperor Khusru II and 'that the context of the use of the image could favour the identification as Xwarrah, perhaps partly overlapping with a personification of Adur' and that 'a similar interpretation could indeed be proposed for the Kushano-Sasanian image' (Sinisi 2015, 219). This suggestion does not take account of a coin issued in the name of Varahran (Y-O.G1-i, reverse 1c), probably after the Kidarites had assumed power where the god with bull is shown wearing the same crescent headdress and with his head surrounded by flames. The die engraver of this coin mixed the two iconographies of the 'high god'. Although two iconographies for the same god is exceptional, the flaming halo and the crescent headdress are not unprecedented for the 'high god', as the flaming halo first appeared for the Kushan version of the god Oesho on the late coins of Vasudeva I (F.G1-iii) and the flaming halo was joined by a crescent diadem on the imitation coins issued after the Kushano-Sasanian take over of the former Kushan gold mint at Balkh (F-imit.G1-i, -ii, -iii and -iv). The two forms of imagery can both be understood to represent the same deity, the Kushano-Sasanian version of the Kushan god Oesho.

Anahita and Nana

The coin designs of the first two Kushano-Sasanian kings Ardashir I and II include representations of the Sasanian goddess Anahita. On the coins of Ardashir I (R.C1-i) she is shown offering the Kushan royal headdress to the king, who raises his right hand to accept it. The goddess is identified by a label *'nhyt MROTA* (lady Anahita). She wears a tripartite (crenellated?) crown and a full-length dress and long scarf or cloak. She offers the headdress with her right hand and holds a staff with a ball finial in her left. Apart from the replacement of the diadem by the Kushan royal headdress, the scene is a typical early Sasanian divine investiture. The same goddess also appears on coins of Ardashir II (S.C1-i) wearing the same costume, with the tripartite crown with ribbons hanging down, now clearly crenellated, and holding the same staff. On this coin type she is shown on her own, seated on a throne with a high-arched back and offering a

King	Code	Pahlavi		Bactrian	
		name	titles (* = position of name)	name	titles (* = position of name)
Ardashir I	R.C1-i	*ʾrthštr y ʾrthštr*	*mzdysn bgy * kwsʾn MLKA mrwy MLKA*		
Ardashir II	S.G1-i S.C2-i			ΑΡΔΑÞΟΡΟ	* ΚΟÞΑΝΟ ÞΑΟ
	S.C2-ii			ΑΡΔΑÞΟΡΟ	ΒΑΓΟ * ΟΟΖΟΡΚΟ ΚΟÞΑΝΟ ÞΑΟ
	S.C1-i	*ʾrthštr*	*mzdysn bgy * RBA kwšʾn MLKA*		
Peroz I	T.G1-i T.C1-i			ΠΙΡΩΖΟ	* ΟΟΖΟΡΚΟ ΚΟÞΑΝΟ ÞΑΥΟ
	T.G1-ii T.C1-ii			ΠΙΡΩΖΟ ΠΙΟΡΩΖΟ	* ΟΟΖΟΡΚΟ ΚΟÞΑΝΟ ÞΑΥΟ
	T.G2-i			ΠΗΡΩΖΟ	* ΟΟΖΟΡΚΟ ΚΟÞΑΝΟ ÞΑΟ
	T.S1-i	*pylwzy*	*mzdysn bgy * RBA kwšʾn MLKA*		
	T.C1-iii	*pylwzy*	** kwš'n MLKA*		
	T.C2-i T.C2-ii			ΠΙΡΩ/ΖΟ	* ÞΑΥΟ
Hormizd I	U.G1-i			ΩΥΡΑΜΑΖΔΟ	* ΟΟΖΟΡΚΟ ΚΟÞΑΝΟ ÞΑΥΟ
	U.G1-ii U.G1-iv U.G2-i			ΩΥΡΑΜΑΖΔΟ ΟΥΡΑΜΑΖΔΟ	* ΟΟΖΟΡΚΟ ΚΟÞΑΝΟ ÞΑΥΟ
	U.G1-iii			ΩΥΡΑΜΑΖΔΟ ΟΥΡΑΜΑΖΔΟ ΟΥΟΡΑΜΑΖΔΟ	* ΟΟΖΟΡΚΟ ΚΟÞΑΝΟ ÞΑΥΟΝΟ ÞΑΥΟ
	U.G2-ii			ΟΥΡΑΜΑΖΔΟ	* ΟΟΖΟΡΚΟ ΚΟÞΑΝΟ ÞΑΥΟΝΟ ÞΑΥΟ
	U.G3-i U.S1-i U.S2-i	*ʾwhrmzdy*	*mzdysn bgy * RBA kwšʾn MLKAn MLKA*		
	U.G3-i reverse	*ʾwhrmzdy*	*mzdysn bgy * RBA kwšʾn MLKAn MLKA*		
	U.S1-i U.S2-i reverse	*ʾwhrmzdy*	** RBA kwšʾn MLKAn MLKA*		
	U.C1-i U.C1-ii	*ʾwhrmzdy*	** RBA kwšʾn MLKA * kwšʾn MLKA * MLKA*		
	U.C1-iii	*ʾwhrmzdy*	** kwšʾn MLKA * MLKA*		
	U.C1-iv	*ʾwhrmzdy*	** kwšʾn MLKAn MLKA*		
	U.C1-v	*ʾwhrmzdy*	** MLKA*		
	U.C2-i	*[ʾwhrmzdy]*	*mzdysn bgy * [kwšʾn MLKA]*		
	U.C2-ii U.C2-iii			ΚΑΒΑΔ	
	U.C2-iv			ΜΗΖΗ	
Hormizd II	V.G1-i			ΩΥΡΑΜΑΖΔΟ	* ΟΟΖ/ ΟΡΚΟ ΚΟÞΑΝΟ ÞΑΥΟ
	V.G1-i reverse	*ʾwhrmzdy*	** MLKA*		
	V.C1-i V.C1-ii	*ʾwhrmzdy*	** MLKA*		
	V.C2-i			ΜΗΖΗ	
Peroz II	W.G1-i W.G2-i			ΠΙΡΩΖΟ	ΒΑΓΟ * ΟΟΖ/ΟΡΚΟ ΚΟÞΑΝΟ ÞΑΥΟ
	W.C1-i	*pylwzy*	** kwšʾn MLKA*		
	W.C2-i			ΜΗΖΗ	
Shapur II	X.C1-i			ΚΑΒΑΔ	
	X.C1-ii X.C2-i			ÞΑΒΟΡΟ	
	X.C2-i	*šhpwhry*			

King	Code	Pahlavi		Bactrian	
		name	titles (* = position of name)	name	titles (* = position of name)
Varahran	Y.G1-i			OPAYAPANO OAPAAYPANO OAPAYPANO	BAΓO * OOZOPKO KOÞANO ÞAYO * OOZOPKO KOÞANO ÞAYO
	Y.G1-ii			OAPAYAPANO	BAΓO * OOZOPKO KOÞANO ÞAYO
	Y.C1-i	*wrhr'n*	* *RBA kwš'n MLKA* * *kwš'n MLKA*		
	Y.C1-ii	*wrhr'n*	* *RBA kwš'n MLKA* * *kwš'n MLKA* * *MLKA*		
Varahran + Kirada	Y-O.G1-i Y-O.G1-ii Y-O.G1-iii			OAPAYPANO some blundered	BAΓO * OOZOPKO KOÞANO ÞAYO
Varahran + Peroz	Y-P.G1-i			OAPAYPANO some blundered	BAΓO * OOZOPKO KOÞANO ÞAYO
	Y-P.C1-i	*wrhr'n*	* *kwš'n MLKA*		
Varahran + Kidara	Y-Q.G1-i			OAPAYPANO some blundered	BAΓO * OOZOPKO KOÞANO ÞAYO
	Y-Q.C1-i Y-Q.C2-i	*wrhr'n*	* *RBA kwš'n MLKA*		

Table 2.15 Kushanshah titles as found on Kushano-Sasanian coins

diadem with her right hand. Once again she is labelled, but with a different spelling: *'n' hyt MROTA*, and with two additional words, read by Enrico Morano (pers. comm.) as *phrz y brzy* (the lofty protector).

A more elaborate representation of Anahita appears on a so-far unique gold coin of Hormizd II Kushanshah (V.G1-i). The design is modelled on the silver coins of Peroz I and Hormizd I, but substituting Anahita for the 'high god'. The goddess is seated on an apparently backless throne, offering a diadem to the king with her right hand and holding a bow over her shoulder with her left. She wears a flat crown with long ribbons and a long dress. She is faced by the king who raises his left hand to acknowledge the goddess and with his right makes an offering using a ladle over an altar in the form of a bird, probably an eagle or other raptor. Smoke rises from the altar. As before, she is labelled, again in Pahlavi, but with a different spelling: *'n' hyt' MROTA*. The bust of this version of Anahita also appears emerging from the top of a fire altar on the Balkh mint copper coins of Hormizd II (V.C1-i), again identified by her name in Pahlavi. The bird altar is perhaps related to the fire altar decorated with eagles found in the excavations at Surkh Kotal in northern Afghanistan (Fussman 1983, 48, fig. 20; a connection suggested by Frantz Grenet pers. comm.).

In the Kushan pantheon Nana takes the place of Anahita and on a few coins of Huvishka (E.G2-iii and -iv, reverses 4f and 4j) is labelled in Bactrian NΩNEITO, which could be a Bactrian rendering of Anahita. Her appearance on one type of Kushano-Sasanian coin type may reflect the correspondence between these two gods. On the first southern copper issue of Peroz I (T.C2-i, reverse 1a), she is shown emerging among the flames from the top of the fire altar/throne. She is shown with a large halo and with a flower-like device on her forehead. In Kushan designs she normally has a lunar crescent on her forehead and the flower-like device may be a mistaken interpretation of this feature. She is labelled BAΓA NANA, and is paired with the similar representation of the 'high god' on this issue. This reflects the pairing of Oesho and Nana on a gold coin type of Huvishka (E.G1-ii, 1/4d, reverse 4c).

Mithra

Mithra, a popular god in both the Kushan pantheon and Sasanian royal cult, appears on two Kushano-Sasanian coin types (S.C2-i, -ii). The copper coins of Ardashir II have two versions of an enthroned image of this god, a design never featured on Kushan coins. The god is seated on a high-backed throne, wearing a tunic and leggings, with the same beard and hair buns as the god and bull-type images of the 'high god'. His right hand is raised offering a diadem and the left rests on the hilt of his sword, which is between his knees. His head is surrounded by a rayed halo, as on Kushan coins and diadem ribbons hang over his shoulder. The two versions differ by their inscriptions: BAΓO MIYPO (S.C2-i) or IAZAΔO MIYPO (S.C2-ii). The form MIYPO differs from the Kushan version of his name MIIPO or MIOPO, and reflects Persian pronunciation *myhr*, with the Bactrian Y representing the sound 'h'. The obverse linked with the two reverses also differ. The former shows the king making an offering on a small fire altar with a tripartite stem, and the latter on a bird-shaped altar, an eagle or other raptor as on the gold coin of Hormizd II featuring Anahita (see above). The other type is on a more conventionally Sasanian coin design on the gold dinars of Hormizd I with the mint name Merv. The god is standing beside a tall fire altar opposite the king. The god offers a diadem with his right hand and the king raises his right hand to acknowledge the god. The god is again wearing tunic and leggings and has a sword, holding its hilt in his left hand. The design is identical in structure to the investiture scenes on the coins of Sasanian emperors Hormizd I and Bahram II. The god is not labelled, but is easily identifiable as Mithra as he has rays emanating from his head and wears the same costume and sword as on the coins of Ardashir II.

Ardochsho

This Kushan goddess is not represented in Sasanian royal cult, although she can be associated through her name with the Zoroastrian deity Aši (Rosenfield 1967, 74; Grenet 2015, 215). She is normally represented using the imagery of Greek Tyche or Roman Fortuna, holding a cornucopia and wearing a city crown (either as crenellated walls or as a cylindrical *polos*). From the reign of Kanishka II her image became a standard feature of Kushan coin design, so it is not surprising to see her depiction on the coins of Peroz I (T.G2-i) on the first coins issued by the Kushano-Sasanians after they had captured territory from the Kushans in the reign of Kanishka II's successor. The details of Ardochsho's throne on Peroz I's coins seems to be copied from an early coin of Kanishka II (G.G1-i). Her role on this coin is as the goddess of Kushan royal good fortune offering the Kushan crown to Peroz II. The concept is similar to the Ardashir I Kushanshah coins showing Anahita giving him the Kushan crown after the Kushan's northern territory had been captured by the Sasanians. It is interesting that whereas the prototype coins of Kanishka II show Ardochsho wearing a crown decorated with the double crescent of the Indian nandipada symbol of good fortune on her head, the Peroz I coin shows her wearing the *polos*, as she is often shown in the Mediterranean world. On Parthian coins the goddess of good fortune is often depicted wearing a crenellated crown, but perhaps the *polos* is used here to distinguish her from Anahita, who wears a crenellated crown on the earlier Kushano-Sasanian coins of Ardashir I and II.

Manichaeism

The Kushano-Sasanian kingdom flourished during the period of the beginning of Mani's mission, which started *c.* AD 240 and lasted until AD 277. Mani travelled to India early in his mission *c.* AD 240–2, but it is not clear whether he passed through either Kushan or Kushano-Sasanian territory (Sundermann 2009a) and before his death was said to have been planning a trip to the Kushan realm (presumably the Kushano-Sasanian realm). After Mani's death his followers fled towards the east and are thought to have entered the Kushanshah's kingdom (Staviskii 1986, 201; Sundermann 2009b), and an early Manichaean text in Bactrian survives (Gershevitch 1984). Although it is possible that Peroz I Kushanshah could be the brother who encouraged Mani early in his mission (see §R–Y.1 above), there is no evidence to confirm this supposition.

Buddhism

There is no textual evidence of the Kushano-Sasanian kingdom engaging with the Buddhist communities within their territory. Monastic communities continued to flourish, although some Buddhist sanctuaries were taken over for Zoroastrian worship in Termez (Staviskii 1986, 198).

R–Y.6 Kushano-Sasanians: contemporaries and international contacts

Apart from the brief allusions to Kushano-Sasanian kings in the sources mentioned above (§R–Y.1 and .3) there is little evidence to explore the relationships they had with any peoples other than their Sasanian overlords, the Kushan empire and the Kidarite Huns.

One additional series of coins relating to the Sasanians begins in the east in the reign of Shapur II (AD 309–79). These coins have been found in the lower parts of the Indus, and are probably the issues of a kingdom centred on Multan or some town further downriver. They are issued in gold until the early 6th century and appear in almost all respects to copy the types (including the crowned bust) of contemporary Sasanian issues. Schindel (2004), Tyler Smith (2012, 385) and Alram (2015) all take this series to be a provincial mint of the Sasanians but this seems unlikely given the absence of an equivalent silver issue, their relatively early break with the weight standards of the Sasanians, and the use of various symbols, particularly flowers, *cakra*s and tamgas, which seem to owe more to Hun iconography than Sasanian.

Tentatively it seems most likely that during Shapur II's intervention in the region the Sasanians sought alliances with local political elements including the former Indo-Parthian dominions, Paratarajas, Kushans, and the newly arrived (or newly formed identities) Kidarite and Alchon Huns. One such group appears to have been established in Sind as a feudatory of the Sasanians, and chose to continue presenting itself numismatically as closely tied to the Sasanian state even after Peroz's defeat in AD 484.

Unfortunately, Sind remains a *terra incognita* for historical study at this period, beyond a few mentions in Armenian texts (Greenwood 2008) and later Arab sources (Bosworth 1999, 102) with suggestions of Sasanian diplomatic connections/overlordship, so these coins provide only limited evidence. It is clear from them that Sind was administratively independent, and the coins present an iconography that ties them directly to the Sasanians but with elements which suggest symbols of authority associated with the Huns. However, that does not tell us if they retained those designs because they maintained a close political connection as allies of Sasanian Iran or simply because they were conservative, nor does it tell us if they were Alchon Huns (ethnically, politically or culturally) or if they were simply adopting the iconography of the most dominant political/military elite in the region. The coin of Mihirakula issued as a part of this Sind gold coinage points more directly to their connection with the Alchon Huns (Classical Numismatic Gallery, Ahmadabad, 11 December 2015, auction 23, lot 66).

8 O–Q and Y–Z Kidarites (*c.* AD 345–467), Sasanian emperor Peroz (in Balkh *c.* 467–76) and the Hephthalites (*c.* 476–520)

This section covers the history of the Kidarites as successors of the Kushans (O–Q) (see **Fig. 2.56**), and the period in which they issued coins in the name of the Kushano-Sasanian ruler Varahran (Y-O to Y-Q) and in their own right (Z to Z-E). It also covers the rule in Bactria of the Sasanian emperor Peroz (Z-F) and of his Hephthalite successors (Z-G to Z-I) during which they both issued Kidarite-style coins.

Y–Z.1 Kidarites to Hephthalites: historical account

After the fall of the Kushano-Sasanian state, the Kidarite Hun king Kidara ruled in his own name the former Kushan

territory in Bactria/Tokharistan and Gandhara and assumed the title Kushanshah. This is evidenced by his issues of Kushano-Sasanian style gold dinars at the Balkh mint and Kushan-style coins in Gandhara using this title. The issue of such coins in Bactria/Tokharistan continued under his successors until their production was taken over by the Sasanian emperor Peroz, who did not use the Kushan title. When Sasanian control of Bactria/Tokharistan was overthrown by the Hephthalites they also continued the issue of Kushano-Sasanian style gold dinars alongside their copies of the Sasanian-style silver coins of Peroz (Vondrovec 2014, vol. 1, 399–401). Like Peroz, the Hephthalites did not use the Kushanshah title. The Kidarite Huns also appear to have overthrown the last of the Kushan kings, Kipunadha, in Gandhara and the northern Punjab as they continued the issue of Kushan-style gold dinars there. Alongside these they also began to issue Sasanian-style silver drachms and copper coins which mixed Sasanian and Kushan-style types. The end of their rule in Gandhara can be observed when their coins were superseded by Alchon Hun coins from the reign of Khingila. This change from Kidarite to Alchon Hun is illustrated by the Kidarite-style coin type of Khingila (Pfisterer 2013, 41, type v18; Vondrovec 2014, 70, type 18B) and by the transition from Kidarite to Alchon style in the coinages in the name of Sri Varma *śrī varma*[*sya*]: Kidarite-style silver drachm (Pfisterer 2013, 220, type 13A) and copper (Vondrovec 2014, 119, type GC-K 23), and Alchon-style copper (Vondrovec 2014, 245, type 46A). One of Khingila's silver drachm types (Pfisterer 2013, 247, type 57; Vondrovec 2014, 294, type 57) with the same bust as the copper coin of Sri Varma has the same reverse treatment as Sri Varma's silver drachm, suggesting they were made sequentially at the same mint, and that the Kidarite-style drachm of Khingila was issued in between them (Pfisterer 2013, 39; see Ch. 3 §Q.1).

The numismatic context suggests that the Kidarite Huns, referred to in western sources as Chionites (Ammianus Marcellinus, 16.9.3–4) and as Kidarites or as Kidarite Huns (Priscus, fragments 33, 41, 47 and 51: Blockley 1983, 336–7, 344–9, 352–3 and 358–9), penetrated the territories of the Sasanian empire, the Kushano-Sasanian kingdom and the remnant of the Kushan empire in the mid-4th century (Cribb 2010). This context provides a framework for interpreting the relationship between the Kidarites and the Sasanian emperors Shapur II (see above, §R–Y.1 – Shapur II) and Peroz (see below).

The earliest historical references to the Huns engaging with the Iranian world are the mention of Honk' troops fighting in conflicts with Armenia in the principality of Mazk'utk' (thought to be that of the Massagetae, east of the Caspian Sea; Choksy 2012, 96) in the AD 330s (P'awstos Buzandac'i, *History of the Armenians* 3.6–7: Bedrosian 1985, 13–17) and later engagements involving the Honk' were also located to the east of the Caspian Sea (Movses Dasxuranci 2.1: Dowsett 1961, 63). It is not clear which group of Huns these are, but in his description of warfare between the Sasanian emperor Peroz and the Hephthalite Huns, the Greek historian Procopius (*Wars* 1.3.1–2 and 1.5.10: Dewing 1914, 12–15 and 22–3) located the Hephthalites at Gorgo on the northern borders of the Sasanian empire, to the east of the Caspian Sea, i.e. the same location as the Honk'. He identified the Hephthalites as Huns, but distinguishes them from the other Huns known to him.

Chinese sources also mentioned the Kidarite Huns, but under the impression that the Kidarites were part of the Yuezhi (*Wei Shu* 102: Yu Taishan 2014, 629, 637, repeated in abbreviated form in *Bei Shi* 97: Yu Taishan 2014, 848, 852–3). Both sources (the *Bei Shi* is thought to copy the *Wei Shu*) identified the king of the Yuezhi as 寄多羅 (*jiduoluo*, Late Han *kɨe-ta-la*, Middle Chinese *kje-tâ-lâ*: Schuessler 2009, nos 18-1, 18-8, 18-10), i.e. as Kidara. This report is believed to be based on information reaching the Northern Wei court *c.* AD 437 (Grenet 2002, 205; Yu Taishan 2014, 630, n. 292, 662, n. 75), or through mercantile contacts about the same period. According to these Chinese sources the Da Yuezhi were invaded by the Ruru (Rouran) people or by the Xiongnu (Huns) and moved west to 薄羅 (*boluo*, Late Han *ba-la*, Middle Chinese *buo-lâ*: Schuessler 2009, nos 1-67, 18-10), i.e. Balkh. The Ruru people were a northern nomad people in the same territory as the former Xiongnu, appearing in the Chinese sources in the second half of the 4th century through to the 6th century (Kradin 2005). The *Wei Shu* describes Kidara crossing the great mountains and going southwards to invade northern India and that five countries north of Gandhara were under his rule. It also reports that merchants from Da Yuezhi visited the Wei capital in the reign of emperor Shizu (AD 424–52). Kidara is also mentioned as the father of the head of the state of Xiao Yuezhi (small Yuezhi), with its capital at the city of 富樓沙 (*fulousha*, Late Han *pu-lo-ṣa*, Middle Chinese *pjəu-ləu-ṣa*: Schuessler 2009, nos 5-33, 10-29, 18-15), south-west of Balkh. The capital is thought to represent Peshawar (Yu Taishan 2014, 638). The Xiao Yuezhi state is said to use gold and silver coins, so clearly not the Xiao Yuezhi of the *Shiji* (123.4a: Zürcher 1968, 360).

Apart from the name of Kidara and the use of gold and silver coins the account seems to owe much to the description of Kujula Kadphises in the *Hou Han Shu*, mirroring the movement west under pressure from the Xiongnu or Ruru, conquering territory to the south, which was under the control of his son (Cribb 2010, 91). The reality of Kidara himself being a Hun suggests that if there was any pressure on him to move into the territory of Balkh and Peshawar, then it could have come from the Ruru who were building a nomad polity to the north of Xinjiang and Central Asia in the late 4th century. However, if the Chinese account draws on the *Hou Han Shu* for this statement, then the references to the Ruru in one version and the Xiongnu in the other could reflect the Ruru taking on the role of threatening nomads in the period of the Wei in the same way as the Xiongnu had done in the Han period. The account can be understood to accurately report that the Kushan state was ruled by a king called Kidara, who controlled both Bactria/Tokharistan and Gandhara, and that gold and silver coins were current in Gandhara, all of which conforms with the numismatic evidence, apart from the *Wei Shu* report being some decades after the reign of Kidara. The information about being driven by Huns or Ruru and controlling five countries could, however, be echoes of the *Hou Han Shu*.

The Kidarite Huns (Οὖνοι οἱ Κιδαριτοι) also appear in the accounts by the Greek historian Priscus of the eastern diplomacy of the Roman empire in the time of the Sasanian emperor Peroz (fragments 33.1, 41.1, 41.3, 47 and 51.1: Blockley 1983, 337–61; also referred to as fragments 25, 31, 33, 37, 41: cf. Carolla 2008). From *c.* AD 456 Priscus (fragment 33.1) reported that the Persian king (Yazdagird II, AD 438–57) was busy at war with the Kidarite Huns and that the conflict continued under his successor Peroz (AD 457–84) until Peroz defeated the Kidarite Huns and captured Balkh (Priscus fragment 51.1). Two Bactrian documents (see below) refer to Peroz as a ruler with authority in Bactria/Tokharistan. The account of Priscus (fragment 41.3) also refers to a young Hun leader (τὸν Οὔνων ἡγουμενον) called Kounchas (Κούνχαν) with whom Peroz made, but betrayed, a treaty *c.* AD 464. It is unclear from the text whether this leader was a general or a king, but he was probably the latter as Peroz offered him, deceitfully, his sister in marriage. As with the Hun king Grumbates in the time of Shapur II, the name Kounchas does not match with any of the royal names derived from the coins. Grenet (2002, 209) has suggested that this is not a name but perhaps a Greek transcription of the title 'Qan of the Huns' (**Xūn-qan*).

The coins issued by the Kidarites before Peroz's capture of Balkh do, however, show that there were at least four, possibly five Kidarite rulers using the title Kushanshah who issued gold coins at Balkh after Kidara. One of their names, Tobazino, is also known from silver coins which can be given some chronological context. Their design was copied from silver drachms of the Sasanian emperor Varahran IV (AD 388–99) and examples have been reported overstruck on drachms of both Varahran IV and his successor Yazdagird I (AD 399–420) (Vondrovec 2014, 388). Vondrovec (*ibid*., 389) concludes that Tobazino issued his silver coins in Bactria 'or at least north of the Hindu Kush' which is confirmed by his gold dinars from Balkh. His coins have the same tamga as the Alchon coins with the bust of Shapur II (AD 309–79) (Vondrovec 2014, vol. 1, 170, type 33, 228–9, types 34, 35), which were issued after the first Alchon coins with busts of Shapur II and Shapur III (AD 383–8) (Vondrovec 2014, vol. I, 170, types 36A and 36B), i.e. issued after AD 383.

Priscus' account of Peroz taking control of Balkh following his defeat of the Kidarites is now also reflected in two of the Bactrian documents which name Peroz as the ruler over Bactria/Tokharistan in Bactrian era years 239 and 242 (or 252) (Sims-Williams 2007, 108–9, document **ea**; 114–15, document **ed**).

The alternative reading of the date in **ed** as 252 seems less implausible both on the basis of the letter forms of the date in the document and the historical context. In Bactrian, numerals reflect Greek practice, so 40 is rendered as the Greek letter *mu* μ and 50 as *nu* ν, but in an earlier form of these letters than those appearing in normal use in the documents. In date formulae in the Bactrian documents the forms of *mu* which seem certain (Bactrian documents E, F, G, O, P, Q and Y) are shaped like a Latin M, with the sides strokes to left and right joined at the top to a curved central valley, whereas the forms of *nu* which seem certain (Bactrian documents C, K and R) have a curved side stroke on the left, joined at the top to a horizontal line, which joins the stroke on the right half way up; the right stroke extends above the central line and curves out below it. One document **cr** dated 157, could also be redated as 147, because, although the central line of its *mu* is horizontal, the right-hand side does not extend above it (for drawings of these dates see Sims-Williams and de Blois 2018, 16–17, table 1).

According to the chronology established for the Bactrian documents by Sims-Williams and de Blois (2018, 122) the Bactrian era began in AD 223, so these documents would be datable to AD 461 and 464 (474), i.e. the earlier document (and perhaps the second one) is dated by them to a period before the date AD 467 or 468 generally agreed (AD 467: Blockley 1981, 122; Given 2015, 154–5; AD 468: Müller 1851, vol. 4, 109) for Priscus' report that Peroz had captured the Kidarite capital (fragment 51.1: Blockley 1983, 358–61). An alternative chronology, starting the Bactrian era in AD 227/8, has, however, been suggested by Schindel (2011), which more closely matches these Bactrian documents to the period of Peroz's control of Balkh, as testified by Priscus, and accordingly during the period when his administration issued gold dinars in the style of the Kidarites (Z-F.G1-i and -ii).

The proposition by Sims-Williams and de Blois (2018; see also de Blois 2008, 993) that the start of the Bactrian era was in AD 223 is based on the transition in tax payments from a father Mir b. Bek to his son Qarwal b. Mir in the Arabic documents from Afghanistan (Khan 2007b). The transition took place in AH 154–5 (AD 770/1–771/2), and they proposed that it resulted from the death of the father in AH 155. They linked this to Bactrian document **Y** (Sims-Williams 2012a, 142–3), dated 549 in the Bactrian era, which was written on behalf of the father Mir b. Bek, setting out a legal break from responsibilities to his brother Bab b. Bek. This created a synchronism between the Arabic documents dated in the Muslim era and a Bactrian era dated document. Sims-Williams and de Blois argued that because Mir was still alive in Bactrian era 549, but already deceased in AH 155 (AD 771/2), that the Bactrian year had to have begun by AD 223 (222 + 549 = 771). On this basis they identified the Bactrian era with the start of the Sasanian dynasty, founded by Ardashir I in AD 223. Schindel's alternative dating of the Bactrian era argued that there was no reason to insist on Mir's death, and that his absence from the documents could simply represent the end of his tax responsibilities, and the start of the Bactrian era could therefore be later, so he linked it with the Kushan era beginning AD 227/8 (Falk 2001a).

De la Vaissière (2018) reviewed Schindel's arguments against the chronology proposed by Sims-Williams and de Blois and found that there were good arguments on both sides, but proposed additional reasons for preferring Schindel's alternative. He argued that the presence of a tax document of Mir's brother Bab, dated AH 155, among the surviving documents, suggested that the legal arrangements documented in Bactrian era 549 had not yet taken place (de la Vaissière 2018, 282). He concluded on this basis that Bactrian era year 549 should be dated after AD 772, so a start date for the Bactrian era could plausibly be placed after AD 223, so why not Schindel's 227/8, as it represented an era already known from other sources. Sims-Williams and de Blois (2018, 40–4) reviewed the views of Schindel and de la

Bactria/Tokharistan	Bactrian era year in Bactrian documents	de Blois 2008; Sims-Williams and de Blois 2018	Schindel 2011; de la Vaissière 2018
	Bactrian era year 1 = 223		Bactrian era year 1 = 227/8
under Sasanian rule	document **ea** year 239	461	465/6
	document **ed** year 242	464	468/9
	[document **ed** year 252]	[474]	[478/9]
under Hephthalite rule	documents **I** and **Ii** year 260	482	486/7

Table 2.16 Comparison of suggested chronologies for the dated Bactrian documents

Vaissière, concluding that their arguments were insufficient to overthrow their own hypothesis. One of their arguments against Schindel and de la Vaissière's dating of the Bactrian era to AD 227/8, was their linkage of it to the Kushan era discussed in the astronomical text the *Yavanajātaka* (Falk 2001a). Schindel (2011, 5–6) erroneously equated the start of this era with Kanishka I (see §D.2), but de la Vaissière (2018, 281) followed the argument of Falk in equating that Kushan era with the second century of the era initiated by Kanishka I in AD 227/8. The era initiated by Kanishka I in year one, as stated in the Rabatak inscription (Sims-Williams 2004, 55, line 2), appears to have reverted to year one at the end of each century (see §D.2), and probably continued down into the medieval period under the guise of the Laukika era, which followed the same pattern of renewal every century, but shifted the start point a few years earlier over time (Bracey 2005, 5–7). Sims-Williams and de Blois (2018, 43–4) were not convinced that an era which normally reverted to year one at the end of each century could be used without that pattern of renewal, as would be necessary if Schindel or de la Vaissière's views were accepted (**Table 2.16**).

A previous dating of the Bactrian era (year 1 = AD 232/3) according to the Tochi Valley inscriptions (Dani *et al.* 1964; Humbach 1971; 1994) can no longer be considered as substantiated by their content (Sims-Williams and de Blois 2018, 30–2).

Even though the solution proposed by Schindel and preferred by de la Vaissière confirms the relationship between the dated Bactrian documents **ea** and **ed** mentioning Peroz as the ruling power in Bactria/Tokharistan and the date of AD 467/8 for his defeat of the Kidarites suggested on the basis of Priscus' report in his fragment 51.1 (Blockley 1983, 358–61), the evidence provided by Priscus (see **Table 2.17**) is not mentioned by any of the publications discussing the chronology of the Bactrian era.

The dating of the relevant fragment from Priscus to AD 467/8 is based on an understanding of the chronology of the compendium of his fragments made by modern scholars. They all agree that the framework for organising the fragments is the order in which the core of them were extracted from his original writings by the historians working for the Byzantine emperor Constantine VII Porphyrogenitus (AD 913–59). The two sources used by these historians were Priscus' *De Legationibus Romanorum* and *De Legationibus Gentium*, records of embassies from the Romans and from other nations. The dates given by commentators are based on the order of the fragments in these *Excerpta de Legationibus*, which is believed to have followed the chronological sequence intended by Priscus (Croke 1983).

The references to the Kidarite Huns relate to ambassadorial exchanges between the Eastern Roman court at Constantinople and the Sasanian emperor as reported in the excerpts from Priscus' records of embassies. The relevant passages relate to an ambassador from the Romans to the Persians called Constantius, but Blockley (1983, 396, n. 160) has suggested that the envoy named in the text as Constantius, should actually be Constantinus, as Priscus says the envoy was a former consul (in AD 457) who had also been a prefect three times (in AD 447, 456 and 459), all of which, Blockley argued, applied to Constantinus, but not to Constantius.

Constantinus was sent to the Persian king Peroz in the context of excerpts (41.1–3; Blockley 1983, 344–9) relating to the reigns of the Eastern Roman emperor Leo (AD 457–74) and of the Western Roman emperors Majorian (AD 457–61) and Libius Severus (AD 461–5) (Blockley 1983, 338–51). Constantinus was initially unable to meet with Peroz as the king was away fighting the Kidarites, and then they were able to meet because Peroz had made a treaty with the Kidarite king Kounchas. These events are dated to AD 464–5 by the modern scholars who have written on Priscus. The treaty failed and in a later excerpt (47: Blockley 1983, 353) it was reported that a diplomatic approach was made to Constantinople by the Persians as war between Peroz and the Kidarites had broken out again; this is dated by scholars to AD 467, but it could be a little earlier as the sequence of excerpts places it as contemporary with events in the Western Roman empire thought to date to AD 465–6. The excerpt (51.1) which reports the success of the Persians in defeating the Kidarite Huns and capturing the city of Balaam (presumably their capital Balkh) is separated from the previous report relating to the Persians by excerpts relating to events in the west, dated by scholars to AD 467–8. The diplomatic activity covered by this excerpt relates to the sending of a Western Roman army to the northern borders of the Persian empire under a general called Heracleius and a Persian embassy to Constantinople to inform the Eastern Roman emperor Leo (AD 457–74) of Peroz's success against the Kidarites. The excerpt is dated by the commentators to AD 467–8 because subsequently Heracleius led an

Priscus fragments according to Blockley (Müller's nos) {Carolla's nos}	Blockley's translation 1983, pp. [Given's translation pp.]	AD dates according to Blockley 1981, 120–3 (Müller's dating)	*Exc. de leg. Gent.*	*Exc. de leg. Rom.*	Western Roman emperor mentioned	Events in the West	Eastern Roman emperor mentioned	Events in the East
32	335	456			Avitus (455–6)	Rome civil conflict; Avitus' death		
33.1 (25)	337 [121–2]	456 (456)		8				Eastern Rome–Lazi war (Black Sea); incidental mention of Persian–**Kidarite** war (in time of Yazdagird II 438–57)
33.2 (26)	337 [122–3]		12				Marcian (450–7)	Gobazes king of Lazi sends envoys to Eastern Romans
34	339	457					Marcian	Marcian's death
35	339	457					Leo (457–74)	Leo's accession
36.1 (27)	339 [134]	458–61 (460–6)	13		Majorian (457–61)	Goth/ Vandal conflict and Rome civil conflict; Majorian's death		(time of Peroz 457–84)
36.2 {73}	339				Majorian			
37 (28)	341 [136]	461 (461)		9				
38.1 (29)	341 [136–7]	461–2 (462)		10	Majorian			
38.2 {74}	341				Majorian			
39. 1 (30)	343 [138–9]	462–3 (462/3)	14					
39.2 {46}	345							
40.1 (30)	345 [138–9]	462–3 (462/3)						Saraguri seek Eastern Roman help against Avars
40.2	345							
41.1 (31)	345 [142–3]	464–5 (464/5)	15			Western Romans seeking help from Eastern Romans against Vandals		Persians seeking Eastern Roman help in fighting **Kidarite** Huns (relating to pass between Black Sea and Caspian Sea)
41.2 (32)	347 [143–4]			11				Eastern Romans send Constantinus as envoy to Persians, waits at Edessa
41.3 (33)	349 [144–6]			12				Persian–**Kidarite** war; embassy of Constantius [i.e. Constantinus*] meets Peroz at Gorga; Persians make treaty with **Kidarites**, under Kounchas/treaty betrayed by Persians
42 {75}	351	465						fire in Constantinople
43	351	465					Leo	Leo chooses a general
44 (34)	353 [147]	465–6 (466)	16				Leo	Gobazes again seeks Eastern Roman help
45 (35)	353 [148]	466–7 (466)	17			Goths seek Roman help	Leo	
46 (36)	353 [149]	466 (467)	18			Atilla's sons seek peace	Leo	
47 (37)	353 [150]	467 [could be 465?]	19					Saraguri attack Persia (relating to pass between Black Sea and Caspian Sea), so Persia seeks Roman help because of Persian–**Kidarite** war
48.1 (38)	355 [151–2]	467 (467–8)	20			Atilla's son attacks Rome		
48.2 (43)	355 [151]					earthquake		
49 (39)	357 [152–4]	467 (467)	21			Rome attacks Goths		
50 {44}	359	467			Anthemius (467–72)	Anthemius' accession		

Priscus fragments according to Blockley (Müller's nos) {Carolla's nos}	Blockley's translation 1983, pp. [Given's translation pp.]	AD dates according to Blockley 1981, 120–3 (Müller's dating)	*Exc. de leg. Gent.*	*Exc. de leg. Rom.*	Western Roman emperor mentioned	Events in the West	Eastern Roman emperor mentioned	Events in the East
51.1 (41)	359 [155]	467 (468)	22					Suani attack Persia, Suani seek Roman help. Rome sent troops under Heracleius (before 468), but help no longer needed as Persians were fighting elsewhere. Then Persians announced they had defeated **Kidarites** and taken Balkh, so Romans withdrew
51.2	361						Leo	Romans attack Tzani (east of Black Sea)
52 (40)	361 [157]	467–8 (467)		13		Eastern Romans threaten Sicily	Leo	
53.1 (42)	361 [157–8]	468 (468)				Eastern Romans attack north Africa and Thrace	Leo	
53.2 {44}	363 [161]							
53.3	363				Anthemius		Leo	Heracleius sent from Constantinople to Libya
53.4	367							
53.5	367							
54	369	469				War in Thrace and West; Anthemius' death		
55–63	369–73				Anthemius		Leo	
64.1	373	472			Anthemius			
64.2	373							
65	373	472–4			Olybrius (472) Glycerius (473–4) Nepos (474–5)	events in Rome, accession of three emperors		

* Blockley 1983, 396, n. 160, corrects the identification of Constantius to Constantinus.
Bold numbers mark the texts which mention the Kidarites.
Exc. de leg. Gent. and *Exc. de leg. Rom.* are *De Legationibus Gentium* and *De Legationibus Romanorum*, from *Excerpta de Legationibus.* The excerpt numbers indicate the sequence in which they were extracted by Constantine Porphyrogenitus

Table 2.17 Priscus' fragments relating to the Kidarites with contextual information (Blockley 1981; 1983; Müller 1851, 102–9; Carolla 2008; Given 2015)

expedition to north Africa after the accession of Anthemius (AD 467–72) as Western Roman emperor (Procopius, *Wars* 3.6.5–9: Dewing 1916, 57; Priscus fragment 53.3 according to Blockley 1983, 364–5).

Priscus' extract 51.1 therefore provides a *terminus ante quem* for Peroz's overthrow of the Kidarites *c.* AD 468, as it is in that year that it was reported to the Eastern Roman court, but the *terminus post quem* for this event is only marked by the extract 47, which, although dated AD 467 by commentators, could be placed as early as 465 while retaining the integrity of the sequence of Priscus' excerpts. The only indication that it could be towards the second half of the resulting bracket AD 465–8 is the situation described in extract 51.1, where the Persians are described as fighting elsewhere than on their northern border immediately before the announcement of their victory. Unfortunately, the timescale of these events is not in the extract. Even if the establishment of Peroz's authority in Bactria/Tokharistan happened as early as AD 465, the dating of the Bactrian document **ea**, acknowledging this authority, to 461 still seems implausibly early and makes Sims-Williams and de Blois' chronology of the Bactrian era difficult to accept. Schindel (2011)'s suggestion that the Bactrian era began in AD 227/8, dating the document to 465/6 fits better the likely date of the establishment of Persian rule in Bactria/Tokharistan. The conclusion seems to be that the Kushano-Sasanian administration in Bactria/Tokharistan continued the use of the second century of the era founded by Kanishka I shortly after it had begun (see above), but by the end of that century had either lost the knowledge that such a renewal system was expected or decided to establish their own system, which we now know as the Bactrian era. The only caveat which should be attached to this analysis is the paucity of the surviving records which could hide from us events which could have shaped a different sequence of events in Bactria/Tokharistan, such as the to-and-fro of superiority in the war between Peroz and the Kidarites, which could have given Peroz temporary control before his final victory *c.* AD 466/7.

Even though attested by coins (Vondrovec 2014, vol. 1, 405–6), the date of Peroz's loss of control of Bactria/Tokharistan to the Hephthalites is not explicitly stated in

contemporary accounts, but according to Procopius (*Wars* 1.3: Dewing 1914, 13–21), Peroz lost a major battle with them in the reign of the Roman emperor Zeno (AD 474–91). At the time of this defeat a Roman envoy called Eusebius, sent by Zeno, accompanied Peroz and his army. At the end of the battle Peroz was captured by the Hephthalites and forced to submit to them. According to the Syriac chronicler Joshua Stylites (10.243.8–13: Greatrex and Lieu 2002, 48), Zeno effected Peroz's release by paying off the Huns (Hephthalites), probably in relation to these events. Eusebius is unlikely to have been sent to the Sasanian court before AD 476 when Zeno took full control of the Eastern Roman empire, but the battle could have taken place later as it was followed soon after, according to Procopius, by a further war with the Hephthalites (*Wars* 1.4: Dewing 1914, 21–31). This recommencement of war by Peroz upon the Hephthalites led to his eventual defeat and death in 484.

There is nothing in the sources to say at what point Peroz lost control of Bactria/Tokharistan, but it seems certain that he lost it to the Hephthalites following one of these defeats, as they start issuing imitations of his silver drachms signed with the start of their name in Bactrian HB[OΔAΛΩN] (Hēbodalōn) and the mint name BAXΛO (Bachlo), and the first issues apparently re-using Sasanian coin dies (Vondrovec 2014, vol. 1, 399–406). Two Bactrian documents also suggest the same consequence. Documents **I** and **Ii** (Sims-Williams 2012a, 44–7) record payment of tax to the Hephthalites. Both are dated Bactrian era year 260, i.e. AD 482 according to Sims-Williams and de Blois' dating (2018, 122) or 486/7 according to Schindel (2011) and de la Vaissière (2018). As the evidence from Procopius places the Hephthalites' first defeat of Peroz at an unspecified time after 476, and they might have taken control of Bactria/Tokharistan after that, then these documents do not contradict either of the dates proposed, although the later date is less problematic as it falls after Peroz's final defeat and death.

There are various other versions of these encounters between Peroz and the Kidarites and Hephthalites coming from Greek, Syriac and Armenian sources. Procopius describes the death of Peroz at the hands of the Hephthalites in AD 484 (*Wars* 1.4.14: Dewing 1914, 24–5). Joshua the Stylite (section 10) writing in Syriac describes Peroz's capture by the Huns and his ransom in the time of the Roman emperor Zeno and then his death in a second war against them. The Armenian historian Sebeos (chapter 8) described the final phase of Peroz's conflicts as a war with Huns and Kushans in which it is the Kushans who fight with Peroz and kill him (Thomson *et al.* 1999, 4–5), but there is no evidence from the coins that the Hephthalites called themselves Kushanshah, so Sebeos was probably confusing Peroz's earlier and later wars. Another Armenian historian Elishe (1.9–12: Thomson 1982, 64–6) recounted the war waged for two years by Peroz's predecessor Yazdagird II (AD 438–57) against the Huns who are called Kushans, i.e. the Kidarite Huns, in the time of the Roman emperor Theodosius II (AD 401–50). According to his account Yazdagird II was unable to conquer the Kidarites, but in AD 449/50 made them withdraw to their stronghold (2.18: Thomson 1982, 72).

As well as the numismatic, documentary and literary evidence for the transition of power in Bactria/Tokharistan from the Kidarite Huns to Peroz and then back to the Huns, but now the Hephthalites, there is also evidence of the extent of the Kidarite Hun kingdom from a group of sealings found in Swat (ur Rahman *et al.* 2006; Lerner and Sims-Williams 2011, 72–4, nos AA 2.1, 2.2 and 2.3). These show a ruler with the same crown as that worn on coins by Kidara (Cribb 2010, 96, 138 and 146, figs 73 and 74) and with an inscription in Bactrian giving the ruler the titles king of the Huns YONANOÞAO (honanoshao) and great Kushan king OAZAPKO KOÞANOÞAO (oazarko koshanoshao). They also identify him as the ruler of Samarkand (ΣAMAPKANΔO AΦÞIIANO, samarkando afshiiano). Zeymal (1978, 208; 1996a, 362, 365, no. M20) also identified a 4th-century silver coinage from Samarkand bearing the name Kidara in Sogdian letters *kydr*, which is dated by Naymark to the late 4th century (Naymark 1991, 159–61). These pieces of evidence show that Kidarite Huns based in Bactria/Tokharistan and Gandhara also ruled in Sogdia in the time of Kidara.

Some further insights into the history of this period can be gained from the references to embassies from Sogdia, Sasanian Iran and the Hephthalites taking tribute to the Chinese court during the period of the Wei dynasty as included in its chronicle the *Wei Shu* (魏書). Tribute envoys from Sogdia 粟特 (*sute*, Late Han *siok-dək*, Middle Chinese *sjwok-dək*: Schuessler 2009, nos 11-20, 4-26), where the Kidarites were in control, were regular from AD 435 (*Wei Shu* 4a.41; 90.3 https://ctext.org/sanguozhi/zh), 437, 439, 444, 457, 466, 474 and 479 (*Wei Shu* 4a.45, 4a.54, 4b.15, 5.13, 6.9, 7.12 and 7.33). The AD 457 tribute mission brought to the Wei court the information that Sogdia was ruled by a Xiongnu king called 忽倪 (*huni*, Late Han *huət-ŋe*, Middle Chinese *xwət-ŋiei*: Schuessler 2009, nos 30-20, 7-11) and that king Huni (it sounds like a designation rather than his actual name) was the third or fourth king to rule there after the state was conquered by the Huns (Yu Taishan 2014, 615–17, n. 207). This suggests that Kidara was the first Kidarite ruler in Samarkand, three generations earlier, and that Huni was one of the later kings, either one of those on the post-Kidara coins, or a separate local ruler. The tribute missions from Sogdia ended in 479, not long after the Kidarites lost their control of Balkh to Peroz *c.* 466/7, suggesting that they held on to Sogdia for a little longer. There is, however, the possibility that 粟特 (*sute*) is not Sogdia, but another state, as the *Wei Shu*'s description of it places it further north on the shores of the Aral Sea; if so then king Huni remains a puzzle. Yu Taishan, however, dismissed the description of the location of Sute, insisting it is Sogdia (2014, 616, n. 202).

According to the *Wei Shu* Sasanian Iran also sent tribute envoys to the Wei court, in AD 455, 461, 466, 468, 476 (*Wei Shu* 5.10, 5.28, 6.5, 6.13, 7.19) and then 507, 517, 518, 521 and 522 (*Wei Shu* 8.33, 9.11, 9.16, 9.24, 9.28). It was called Persia in the Chinese text, *bosi* 波斯 (Late Han *pai-sie*, Middle Chinese *pwâ-sje*: Schuessler 2009, nos 18-16; 7-26). The tribute mission of 518 is also reported as bringing greetings from the Sasanian emperor Kawad I (*Wei Shu* 9.35: Yu Taishan 2014, 618–9). The *Wei Shu* (90.9) also describes an embassy from Persia sending a tamed elephant and precious goods to the Chinese court in the reign of emperor Xianwen

(AD 466–71), probably referring to the embassy of AD 466 or 468. What is noticeable in these records is the gap in embassies between AD 476 and 507, a significantly long gap in comparison with the earlier and later ones, perhaps reflecting the war with the Hephthalites and subsequent focus in the Sasanian empire on the succession after Peroz, with contact only being re-established well into the second reign of Kawad I (AD 488–97, 499–531). Could one see the stopping of embassies in 476 as significant and an indicator of the end of Peroz's control of the route to China to the Hephthalites. The *Wei Shu* records of tribute missions also mention the Hephthalites, but apart from an embassy in AD 456 (*Wei Shu* 5.12), the full flow of missions only began from 509, 511, 512, 513, 517, 518, 519, 524 x2, 525 and 532 (*Wei Shu* 8.39, 8.49, 8.54, 8.56, 9.11, 9.14, 9.18, 9.32, 9.36, 9.41 and 11.17). The last record is close in date to when the Wei dynasty lost power in 534. The main phase of ambassadorial activity by the Hephthalites coincides with that coming from the Sasanian court under Kawad I, and perhaps reflects the close ties between them and Kawad.

The first name appearing on the Bactrian gold coins issued after the Hephthalite capture of Bactria/Tokharistan is Mehama. This name is the same as the name of Meyam the local ruler referred to in the Bactrian documents **ea** and **ed** dated years 239 and 242. These documents identify Meyam as the local king of the Kadags (μηιαμο καδαγανοÞαο) and governor under Peroz king of kings (πιρωζο Þαυανοþαο) (Sims-Williams 2007, 108–9, 114–15); perhaps the local ruler and the coin issuer are the same person?

The imagery of Mehama on the Balkh gold coins includes the Alchon Hun tamga, connecting these issues with the Mehama silver coins (**Fig. 2.57**) issued south of the Hindu Kush, so it is uncertain whether they were the issues of the same person, as Vondrovec suggests (2014, 142–4, 188–9). There is another Mehama mentioned, Sanskrit: *mahāṣāhi me*[*ha*]*me* …, as a Hun king who was a beneficiary of Buddhist merit. He is identified as the ruling king *mehame* [*r*]*ājye* in an Alchon Hun Buddhist document dated year 68 of an unnamed era (Melzer 2006, 262–3, lines 38–9). The date could be in the Kushan era, centuries commencing AD 127, i.e. AD 494/5 or in the Laukika era AD 492/3 (Melzer 2006, 264; or in both if they are the same era, as seems likely). It is possible that both the Alchano and the Bactrian Mehamas are the same person, but the gap between the gold dinars and the Buddhist document does suggest that there may have been two Mehamas, one in Bactria/Tokharistan and the other south of the Hindu Kush?

The last issuer of gold dinars from the Balkh mint, Adomano, also issued silver drachms in the Alchon Hun-style south of the Hindu Kush (Vondrovec 2014, 144–5). The linked features (see §Y–Z.3 below) make it clear that both the Balkh gold and the Alchon-style silver were issued by the same Adomano (**Fig. 2.58**), but nothing else is known about this ruler. His title 'king of the East' links him with another Alchon ruler Zabokho, Bactrian ZABOXO, who is also named on his coins as Javukha, Brahmi *javūkha* (Vondrovec 2014, 204–7). This Javukha is named in the Buddhist copper scroll of year 68 (*c.* AD 494/5 or 492/3) as *mahārāj*[*e*] … *javūkhena* immediately after the name of Mehama (Melzer 2006, 266, line 39), so it is likely that Adomano is also an Alchon ruler in the second half of the 5th century and both issuers of the Bactrian gold of the Hephthalites are the same people as the issuers of Alchano silver coins. This provides important evidence of the relationship between the Alchano coin issuers and the Hephthalites.

Y–Z.2 Kidarites to Hephthalites: problems of chronology

There is a long-running disagreement about the date of the Kidarite kingdom. The chronology presented here is based on the coin sequences and connections with the coins of the Kushans, Kushano-Sasanians, Sasanians and Guptas. The dates of Sasanian and Gupta emperors are relatively stable, so the relationships between their coins and the Kushan, Kushano-Sasanian and Kidarite coins should be the area for discussion.

The main source of disagreement is the mismatch between the numismatic evidence placing Kidara in the second half of the 4th century and the textual references to Kidara in the Chinese sources in the mid-5th century and Priscus' account of Sasanian engagements with the 'Kidarite Huns' a little later. This mismatch has been explained by Grenet (2002, 206–7) as a misreading of the Bactrian inscription on the Tepe Maranjan hoard's gold coins (Z.G1-i, -ii, -iii, -iv). He suggested that instead of naming Kidara, the Bactrian inscription is still naming Varahran Kushanshah, with the prefix KI, a version of the Pahlavi *kdy* (= Kayanian) which appears on the silver coins of the Kidarites (Pfisterer 2013, 210–15, types 5–10; Vondrovec 2014, 57–9, types 8–10) and on Sasanian coins from the time of Yazdagird II (AD 438–57). He also points to the link between the Kidarite silver coins in the name of Kidara Kushanshah, written in Brahmi (Pfisterer 2013, 221, type 14; Vondrovec 2014, 64–5, types 8–10), with the silver drachms of Yazdagird II. The links between Kidara and Yazdagird II confirm his view that the Chinese and Greek sources date Kidara in the mid-5th century.

The construction of Kidarite chronology has also been used to argue that Sogdia fell to the Kidarites and interrupted the flow of envoys from Sogdia to the Chinese court between 441 and 457 (Grenet 2002, 207; de la Vaissière 2005, 108). De la Vaissière (2005, 107–8) saw the Kidarites as the Xiongnu who captured Sogdia *c.* 440 and whose third king Huni was on the throne when the Chinese received information *c.* 457, whereas Grenet (2002; 2005) saw the Kidarites as the ousters of the Xiongnu king Huni after his reign was reported to the Chinese court in 437, and he argued that the Kidarite invasion of Gandhara must have taken place after 412 as it is not mentioned by Faxian, the Buddhist pilgrim on his journey through Gandhara. The Samarkand coins and the Swat sealing clearly link Kidara with Sogdia and Gandhara, so how can the Chinese evidence of king Huni and king Kidara and Priscus' description of the Kidarite Huns be reconciled with the numismatic evidence that Kidara reigned in the second half of the 4th century?

The Tepe Maranjan hoard provides a strong marker for the Kidarite coinage. The linkage between the tamga on the gold coins in the hoard and Kidarite copper coins from

Figure 2.57 Silver drachm of Mepama (Mehama), Hun ruler, issued in greater Gandhara, with Hun tamga before the ruler's face, inscribed with his name in Brahmi script (BM 1857,0813.91, 3.32g, 27mm).
The fire altar with attendants on the reverse is based on Sasanian coin designs

Figure 2.58 Silver drachm of Adomano, 'king of the East', Hun ruler, issued in greater Gandhara, inscribed with his name and title in Bactrian (BM 1894,0506.203, 3.62g, 23mm).
The Huns used Indian religious emblems on their coins, here the wheel and conch emblems of the Indian god Vishnu

Gandhara ties these coins to the Kidarites. It can also be observed that some of the coins attributed here to Kidara in the Tepe Maranjan hoard (Z.G1-iii and -iv) have the same rosette control mark as the Gandhara coins of Kidara Kushanshah (Q.G1-i, -ii). The positions of these types in the sequence of tamga-marked Balkh mint coins and of the Kidarite issues in Gandhara correspond. The reading ΒΑΓΟ ΚΙΔΑΡΑ ΟΟΖΟΡΚΟ ΚΟΒΑΝΟ ΒΑΥΟ on the Tepe Maranjan and related coins (Z.G1-i, -ii, -iii, -iv) is often confused by the die engraver, because the letters Δ, A, P and O are written in Bactrian with a round-shape, distinguished by the way they link to the surrounding letters. On the coins these letters become circles in the hands of illiterate die engravers and they often miscount the number of circles between KI and ZOPKO: there should be six, but the coins have any number between four and nine. Grenet has suggested that the inscription should read ΒΑΓΟ ΚΙ ΟΑΡΑΥΡΑΝΟ ΟΟΖΟΡΚΟ ΚΟΒΑΝΟ ΒΑΥΟ, but it cannot do so as the letters Y and N would interrupt the string of circular letters and there are no coins on which this happens. The Tepe Maranjan hoard also contains a gold dinar of Orōlano, the Kidarite ruler of Bactria after Kidara, suggesting that Kidara's reign had finished before the deposit of the hoard and the Sasanian coins in the hoard suggest that the hoard was deposited before the reign of the Sasanian emperor Varahran IV (AD 388–99) as his coins are absent from the hoard (**Table 2.18**).

Another strong marker of Kidara's coins being positioned in the second half of the 4th century is the relationship between his crown and that worn by the king on the Gandharan gold dinars inscribed with the name of the Gupta emperor Samudra[gupta] (*c.* AD 330–80). These Samudragupta coins mix the designs of the late Kushans, Samudragupta and Kidara. Like the Tepe Maranjan hoard evidence they place Kidara before 380 (**Table 2.18**).

The Chinese sources and Priscus would therefore be referring to Kidara a few decades after his reign ended. Even if the *Wei Shu*'s reports on Kidara's conquest of Bactria/Tokharistan, his title as king of the Kushans and his son's rule in Gandhara reached China in the mid-5th century, it seems likely that the news was old and incomplete, so had to be embellished with part of the account of the Kushans from the *Hou Han Shu*. Priscus does not mention Kidara himself, but the Huns who identified with his name. Hun kings in Kashmir continued to identify with Kidara from the 5th to the 7th century, by placing his name on their coins (Cribb 2016b; Cribb and Singh 2017), which suggests that he was seen as a key figure to the Huns and this probably explains why they are called Kidarite Huns by Priscus. The coins show that he was not the first Hun ruler to control territory in Bactria/Tokharistan and Gandhara, but he was the first to rule independently and call himself Kushanshah, so was probably seen as the first important figure in their collective memory.

The situation in Sogdia where the Xiongnu established their rule and their third king was Huni also appears to represent the Kidarites, but at a later stage than Kidara. The exact relationship between Huni and Kidara is not clear. The observed gap in envoys travelling from Sogdia to the Chinese court could be explained in other ways than creating an undocumented invasion, such as the distraction of the Kidarites by their interactions with the Sasanian emperors and by the increasing power of their north-eastern neighbours the Hephthalites.

The similarity of the crown worn by the king on one coin with the name Kidara (Q.S2-i) and that of the Sasanian

Sasanian drachms in Tepe Maranjan	Kidarite dinars in Tepe Maranjan	Balkh Kushano-Sasanian style gold dinars		Gandhara Kushan-style gold dinars Silver drachms BM codes (Cribb 2010) Copper coins BM (Vondrovec 2014)		Gandhara		
						Gold dinar of Samudragupta with Kidara crown		
Shapur II 309–79		'Varahran' [+tamga]	Y-O.G1 -i, -ii, -iii	'Kirada'	O.G1-i-ii O.G2-i, -ii, -iii		O.C1	
		'Varahran' [+tamga +Peroz crown]	Y-P.G1-i	'Varahran'		P.S1-i (A1)	P.C1	
				'Peroz'	P.G1-i, -ii P.G2-i, -ii	P.S2-i (B1) P.S3-i (C1)		
		'Varahran' [+tamga +Kidara crown]	Y-Q.G1-i	'Varahran'		Q.S1-i (A2) Q.S4-i (D4)		Q.G3-i
	Z.G1-i, -ii	'Kidara' [+tamga]	Z.G1-i, -ii	'Kidara'	Q.G1-i (rosette on reverse)	Q.S3-i (C2)	Q.C1-i	
Ardashir II 379–83	Z.G1-iii, -iv	'Kidara' [+tamga + rosette]	Z.G1 -iii, -iv	'Kidara' rosette	Q.G1-ii, -iii (rosette on obverse)	Q.S2-i (B3)	(GC-K3)	
Shapur III 383–8	Z-A.G1-i	'Orōlano' [+tamga]	Z-A.G1-i					

Table 2.18 The political and chronological context of Kidarite coins

emperor Yazdagird II (AD 438–57) can be explained in a variety of ways. The crown type in question falls within the usual framework of Sasanian crowns and has the general form with three crenellations of crowns worn by Ardashir I, Shapur I, Shapur II, and in slightly modified form (two crenellations) by Varahran V and Peroz. The distinctive feature which has prompted the link between the Kidarite example and Yazdagird II is the addition of a crescent above, framing the hair ball. A framing motif in this position first appears on Sasanian coins under Varahran IV (AD 388–99), as thin raised ribbons and then as a crescent on the coins of Varahran V (AD 420–38). The raised ribbons frame on Kidarite gold coins of the Balkh mint began while the inscription still acknowledged Varahran Kushanshah and continued into the issues in the name of Kidara Kushanshah and remained a fixed feature of the Balkh mint Kidarite gold coinage. On the silver coinage the framing raised ribbons were the normality, but a framing crescent appears on a few varieties: the crenellated crown type (Q.S2-i) in the name of Kidara and on three types without royal names (Q.S2-ii, Q.S3-ii, Vondrovec 2014, 76, type 24). The argument that the Kidarite coin design has to be copied from that of Yazdagird II has to rely on the proposition that the Kidarite coin designers had to rely on Sasanian coins for their inspiration, whereas the reality is that the die engravers at the Kidarite silver mints were great innovators, creating and widely deploying the remarkable facing bust type which only appeared rarely in Sasanian coin design: just once in the period of the Kidarites on a gold coin type of Varahran IV.

Y–Z.3 Kidarites to Hephthalites: royal images

Representations of the Kidarite kings on coins follow the traditions of Kushan, Kushano-Sasanian and Sasanian coins. Their coins in Bactria continue the designs introduced by the Kushano-Sasanians, with a standing king in armour offering at a small altar and holding a trident, as adapted from Kushan coin designs. The only changes are in the crown types, which become fixed from the second phase of Kidara (Z.G1-ii) onwards, but gradually degenerate in execution until the first phase of the Sasanian emperor Peroz (Z-F.G1-i).

Apart from the so-far unique coin of Kirada bearing the name of Yosa (O.G1-i), the Kushan-style gold coins of the Kidarites copy the last issues of the Kushan king Kipunadha and show the Kidarites as though they were wearing the Kushan overcoat, tunic and leggings with a tall headdress. The Kirada/Yosa coin shows a bearded figure wearing Sasanian court ankle-length dress (with a convex hem), with a sword slung from the belt and a diadem ornamented with a crescent. Otherwise it shows the usual Kushan posture of standing offering at a small altar and holding a spear or standard.

The silver and copper coinage of the Kidarites present a much wider array of representations, some still retaining Kushan designs (O.C1), but mostly they are based on Sasanian silver coin designs. Those closest to Sasanian representations show profile head and shoulder busts wearing decorated tunics and elaborate crowns with flying diadem ribbons. The crowns all follow the normal pattern of Sasanian crown design, with animal and floral motifs and jewelled decorations. It is not clear whether the use of crowns follows the usual Sasanian pattern of one crown per king, or if some kings wear a variety of crowns. The flying ribbons are in various positions in relation to the crown in the same way as on Sasanian coins. Some of the silver and most of the copper coins lack inscriptions which can tie them to a particular ruler and some of the names on them appear to

relate to local rulers rather than the kings of the whole Kidarite kingdom.

As well as drawing on this range of designs the die engravers of the Kidarites were also innovators creating remarkable three-quarter bust types on both silver and copper coins issued in Gandhara. The gold coins follow a broadly consistent progression, but the silver coinage is fairly chaotic, as there seem to be five mints involved following different programmes for the imagery of the ruler (Cribb 2010). Only a small sample of the Gandhara copper series is included here as there are many types which normally do not have the same names in their inscriptions as the gold and silver coins. Fuller listings are available in Vondrovec (2014) and Khan *et al.* (2008). The Balkh copper series follows the royal imagery of the Balkh gold (**Table 2.19**).

After an initial issue copying Kidarite designs (Z-F.G1-i) the Sasanian emperor Peroz adapted the Kidarite design to represent him in his own crown and in a posture more appropriate to a Sasanian emperor (Z-F.G1-ii), standing holding an arrow in his right hand and resting his left hand on the hilt of his sword, wearing mail armour and his own crown (the second type appearing on his Sasanian silver drachms with a crescent at the front and crenellations at the back and his hair ball within a crescent above, Schindel 2004, 390, type IIa). He, however, retained the flaming shoulders seen on Kidarite and Kushano-Sasanian coins. On both types he replaced the Kidarite tamga with a Sasanian diadem emblem which had featured on some of his copper coins (*ibid.*, 392, type 2).

The Hephthalite issues from Balkh in the style of Kushano-Sasanian and Kidarite dinars retain the overall design and the posture of the king, but no longer with the Kidarite crown type after the first imitative issue (Z-G.G1-i). The coins of Mehama simplify the crown to a row of dots above a brim and replace the artichoke device with a trident in a crescent (Z-H.G1-i), still flanked by rising ribbons. The king no longer has flaming shoulders and the degenerate Kidarite tamga of the imitative issue is replaced with the Alchon tamga. The tamga links these coins with those issued by the Alchon Huns south of the Hindu Kush. Among these there are issues in the name of a king called Mehama (Vondrovec 2014, 187–9), but apart from the tamga they have nothing in common. The crown is further simplified to a brim line on the coins of Adomano (Z-I.G1-i) and the trident-in-crescent ornament is replaced by a dotted wheel in crescent. The Alchon tamga is given a slightly different form on his coins and a crescent sits in the field in front of the king's face. The king's ear is shown and a large six-dot earring is suspended from it in place of the hair on Kidarite issues. Adomano's second phase coinage (Z-I.G1-ii) stylises the design, but retains all the features of the first phase, but adding a crescent behind the king's head and removes the shaft of the trident in his left hand. The Alchon coins issued south of the Hindu Kush in the name of a king called Adomano are clearly connected to the Bactrian gold, as they both have the same six-dot earring and dotted wheel device and the same 'king of the East' title in Bactrian ΜΙΙΡΟΣΑΝΟ ÞΑΥΟ (Vondrovec 2014, 203–4). On the southern silver coins he has a different shaped headdress: a tight cap with a crescent at the front, holding the dotted wheel or a trident and with a wing on the side, perhaps a reference to the winged crown of the Sasanian emperor Peroz.

Silver dishes depicting Kidarite and Hephthalite figures have also been reported. The Kidarite attribution is less certain, as the dish in the Hermitage Museum showing a king, hunting wild boars, who wears a ram's horn crown, has slightly different details of treatment from the ram's horn crown worn by Kidarite ruler Peroz (Tanabe 1989, 52, fig. 3). The Hephthalite imagery on a silver dish in the British Museum (**Fig. 2.59**), showing four horsemen hunting, is more certain as it has been agreed by all who have commented on it (e.g. Grenet 2002, 211–12; Errington 2010, 149). One of the figures, who is hunting rams, exactly mirrors the images of Alchon Hun rulers on their early silver coins (Vondrovec 2014, 180, fig. 3.25), which continued through to the images of Adomano on his silver coins (*ibid.*, 203, fig. 3.53). The central image on the dish shows a bare-headed figure resting on a double spray of foliage or feathers, a device which also appears from early Alchon Hun coins through to Adomano. One of the hunters, hunting tigers, has the same bare head. The other two figures wear crowns which resemble Kidarite crowns, one with horns(?), hunting boars, the other with wings, hunting lions. Errington also observed that the figure hunting lions has diadem ties behind his head suggesting that he is the king ('regal head of the group', Errington 2010, 149). Although the figure looks like a Kidarite, the diadem ties and winged crown identify the king as Khingila the early Alchon Hun ruler; as Pfisterer (2013, 41–4) recognised, he wears the same crown as a coin inscribed with his name in Brahmi *khigi*. This issue of Khingila comes at the end of a sequence of three-quarter facing bust coins beginning with issues of Peroz and Kidara (Vondrovec 2014, 55, type 3, 60, type 11) and appears to mark the transition from Kidarite to Alchon Huns in Gandhara. Khingila's reign can be approximately dated by the Tope Kelan relic deposit from Hadda, where his coins were buried with Sasanian silver coins down to Yazdagird II (AD 438–57), Roman gold coins down to the reign of emperor Leo (AD 457–74), silver coins of Kidara and gold coins of the later Kidarite ruler Saloṇavirya (Errington 2017a, 174–91). The absence of later Alchon coins than Khingila suggests that he still reigned until after 457 and the coins were deposited after he had begun to take over in Gandhara, as one of the coins in the hoard is one of his Gandharan issues (Vondrovec 2014, 294, type 57).

Y–Z.4 Kidarites to Hephthalites: forms of names and titles

The Kidarite rulers have a mixture of Hun, Iranian and Bactrian names (**Table 2.20**). As well as the main rulers there are some names on the early Gandharan Kushan-style gold pieces which may also be rulers, but the context is not clear. The early rulers Kirada, Peroz and Kidara are clear from this context, but Kirada does not appear anywhere else. Peroz is also on Gandharan silver and copper coins, and on one Bactrian gold type his initial *pe* is also featured (Y-P.G1-i 1/4d, obverse 1), in the same way as on one of the Gandharan silver types (P.S1-i). The crowns associated with Peroz and Kidara also appear on coins in the name of the last Kushano-Sasanian king Varahran.

Figure 2.59 Silver dish, found in Swat, depicting four horsemen hunting (BM 1963,1210.1, 166mm x 59mm, 819.3g).
The depictions of the riders suggest that they represent elite individuals in the early Alchon Hun period, first half of the 5th century. The rider killing a lion (b) wears the royal diadem and the winged crown worn by the Alchon king Khingila on one of his silver coins. The detail shows another rider wearing a horned crown (c) similar to those worn by the kings on Kidarite coins. The bowl is inscribed in Brahmi (d), which could be read as *khiṅgi*, an abbreviated form of Khingila's name, or *vaṅgā* (its owner's name) and the numerals 206, representing its weight in reduced drachms (*c.* 3.98g) and *ka* (the meaning of which is unclear) (Bakker 2020a, 43–7; Bakker 2020b, 320–2)

After the coins with Kidara's crown in the name of Varahran he issued coins in his own name as great Kushanshah. The Gandharan gold coins also add Kushan to his name, so probably intending to give him the same title. This is in contrast with Kirada (O.G1-ii, O.G2-iii) and Peroz (P.G1-i, -ii, P.G2-i, -ii) who only have Gandhara (*gadahara*) added to their name. As Peroz has *ṣa* after his name on one Gandharan silver type (P.S3-i), it can be presumed that Kirada and Peroz were both Gandharashah and Kidara also had this title before he became Kushanshah. Of the other names on early Gandharan gold, perhaps *haṇaka* and *yasada* also had this Gandharashah title briefly. The name *yosa* appears on the same coin as Kirada, so its status is less clear.

After Kidara there are various names in both the Gandhara and Bactrian gold series. The names *kaṣuma*, *kritavirya*, *saloṇavirya* and *visvama* are featured on the reverses of Kushan-style gold coins (Q.G5) which seem to have been issued in the Punjab (Cribb 2016b). An example of the *saloṇavirya* type was buried in the Tope Kelan relic deposit which contained a Roman coin issued after AD 457, so this series seem to have been issued in the 5th to early 6th century. Imitations of Kidara coins were also issued in Kashmir, including one type inscribed *prakaśa*, probably an abbreviation of the name *prakaśāditya* used by the Alchon Hun king Toramana on his Gupta-style gold coins (Tandon 2015; Cribb 2016b, 102–3). Toramana can be dated *c.* 485–515 on the basis of contemporary inscriptions.

In the Bactrian gold series the names Orōlano, Pidoko, Tobazino, Ōkilano and Ōzmano appear on the coins after Kidara, still calling themselves Kushanshah, but without the prefix 'great'. The readings of Pidoko, Ōkilano and Ōzmano are less certain than Orōlano and Tobazino because of the poor quality of die engraving and the circular form of Bactrian A, Δ, O and P, but the forms of these names are not, as previously thought, just poor renditions of Kidara (Göbl 1984, pl. 67; Vondrovec 2014, 140). Tobazino is also known from silver coins (Vondrovec 2014, 392–6), but without the Kushan part of his title; however, the location of their issue is not known as they do not correspond with any of the Gandharan silver series. There are no traces of these post-Kidara names on the southern coinages of the Kidarites, so presumably the Kidarites in Bactria ruled separately from those in Gandhara after Kidara.

The Gandharan silver coins are often uninscribed or illegible, but the names Peroz and Kidara are clear on some types. A discrete group of coins associated with the name Peroz (Q.S2-ii, P.S5, P.S2 and Q.S4-ii) suggests there may

Mint-metal	Crown	Above crown	Type V = Vondrovec 2014	Image type	Bactrian names	Pahlavi names	Brahmi names
Balkh gold	flat with floral motif	artichoke ribbons behind	Y-O.G1-i, -ii	figure	Varahran		
Balkh gold	flat with row(s) of petals	artichoke ribbons behind	Y-O.G1-iii	figure	Varahran		
Balkh gold	ram's horns, with single crenellation	artichoke ribbons behind	Y-P.G1	figure	Varahran		
Balkh gold	flat with row(s) of petals	flanking ribbons	Y-Q.G1	figure	Varahran		
Balkh gold	flat with row(s) of petals	flanking ribbons	Z.G1-i	figure	Kidara		
Balkh gold	tripartite floral	artichoke flanking ribbons	Z.G1-ii	figure	Kidara		
Balkh copper	flat with floral motif	artichoke ribbons behind	Y.C1-i	profile		Varahran	
Balkh copper	flat with floral motif	globe ribbons behind	Y.C1-ii	profile		Varahran	
Balkh copper	flat with row(s) of petals	artichoke ribbons behind	Y.C1-ii	profile		Varahran	
Balkh copper	flat with row(s) of petals	globe ribbons behind	Y.C1-ii	profile		Varahran	
Balkh copper	ram's horn, with single crenellation	artichoke ribbons behind	Y-P.C1	profile		Varahran	
Balkh copper	flat with row(s) of petals	globe flanking ribbons	Y-Q.C1	profile		Varahran	
Gandhara copper	ram's horn, with single crenellation	ribbons behind	P.C1	profile			Peroz
Gandhara copper	flat with row(s) of petals	flanking ribbons	V. GC-K3	profile			
Gandhara copper	flat with row(s) of petals	flanking ribbons	Y.C1	profile			
Gandhara copper	flat with row(s) of petals	flanking ribbons	V. GC-K24	facing			
Gandhara copper	flat with row(s) of petals	flanking ribbons	Q.C1	facing			
Gandhara silver	ram's horns, with single crenellation	flanking ribbons	P.S1	profile		Varahran	pe
Gandhara silver	ram's horn, with single crenellation	ribbons behind	P.S2	profile		Peroz	
Gandhara silver	ram's horns, with single crenellation	flanking ribbons	P.S3	¾			Peroz
Gandhara silver	ram's horns, with single crenellation	flanking ribbons	P.S4	¾		illegible	
Gandhara silver	tripartite floral	flanking ribbons	Q.S1	profile		Varahran	
Gandhara silver	tripartite floral	flanking ribbons	Q.S3	¾			Kidara
Gandhara silver	tripartite floral	flanking ribbons	Q.S4	¾			Vara
Gandhara silver	tripartite (or double) floral	crescent	Q.S2-ii	facing		Peroz	
Gandhara silver	tripartite floral	crescent	V. 24	profile	illegible		

Mint-metal	Crown	Above crown	Type V = Vondrovec 2014	Image type	Bactrian names	Pahlavi names	Brahmi names
Gandhara silver	tripartite crenellations	crescent	Q.S2-i	profile			Kidara
Gandhara silver	tripartite crenellations		Q.S4-ii	¾			
Gandhara silver	tripartite crenellations		Q.S4-ii	¾			Sri Varma
Gandhara silver	flat crown with row(s) of dots	flanking ribbons	P.S5	profile	Peroz		
Gandhara silver	flat crown with row(s) of dots	flanking ribbons	Q.S4-iix	¾			Sri ?rdhasa
Gandhara silver	flat crown with row(s) of dots	crescent	P.S2	profile	Kushanshah		
Gandhara silver	flat crown with row(s) of dots	flanking ribbons	V. 12A	¾			illegible
Gandhara silver	wings with single crenellations	crescent + flanking ribbons	Q.S3-ii	¾			
Gandhara silver	wings with single crenellation	crescent	cf. Q.S3-ii (Pfisterer 18A)	¾			
Gandhara silver	wings	crescent, no hair ball	V. 18B	¾			Khingila
Gandhara silver	three circles	flanking ribbons	V. 11A	¾			
Gandhara silver	one circle	ribbons behind	Q.S5	profile		illegible	

Table 2.19 Bust variations and names on Kidarite coins

have been a second ruler with this name after Kidara, as three of them have crowns which have the same shape as that of the Sasanian emperor Shapur III (AD 383–8). Coins inscribed with the name Buddhami[tra] which have the same winged crown as Sasanian emperor Varahran IV (AD 388–99) also come after Kidara. The Gandharan Kidarite-style silver series ends with types (Q.S4-ii, Q.S5-i; Vondrovec 2014, 13, 13A, 21, 11A, 304 and 18B) which correspond with issues of the Alchon Hun king Khingila, one of which bears the initial part of his name *khiga* (Pfisterer 2013, 39–46).

The coins issued by the Sasanian emperor Peroz after he had captured Balkh were inscribed with his name in Bactrian form ΠΙΡΩΖΟ without the title Kushanshah, but with his own imperial title 'king of kings', spelt in normal Bactrian ÞAYONANO ÞAO (Z-F.G1-i) or in a Bactrian version of the Pahlavi ÞAYANO ÞAYO (Z-F.G1-ii). His Hephthalite/Alchon Hun successors Mehama and Adomano also omitted the Kushanshah title. Mehama retained the titles ΒΑΓΟ and ÞAO (Z-H.G1-i) as used on Kidarite coins, but Adomano dropped the former title and qualified the later with the prefix ΜΙΙΡΟΣΑΝΟ, literally 'sunrise', i.e. the east (Sims-Williams 2007, 233), so translatable as 'king of the East'. The same title is used by Adomano on his southern silver coins (Vondrovec 2014, 203–4) and by his successor Zabokho/Javukha (*ibid.*, 204–6). What is meant by the East in this context is not clear.

In both western and Chinese accounts various Hun rulers are named who do not match the names of the kings on the coins. The first of these is Grumbates, the new Hun king mentioned by Ammianus, who coincides with Kidara (see above, §R–Y.1 – Shapur II). Priscus (fragment 41.3; Blockley 1983, vol. 2, 348–9) also names a Hun ruler called Kounchas, leader of the [Kidarite] Huns (Κούνχαν τὸν Οὔνων ἡγουμενον) who fell into conflict with the Sasanian emperor just before Peroz captured Balkh. This has been explained as a title rather than a name 'Hun Qan' (Tremblay 2001, 188; Grenet 2002, 209). The same explanation seems to apply to the king of Samarkand called Huni in the *Wei Shu* (see §Y–Z.1 above).

Y–Z.5 Kidarites to Hephthalites: religious connections

The gold coins of the Kidarites from both Bactria and Gandhara are copies of earlier Kushano-Sasanian and Kushan types, so do not provide any insights into the religious practice or beliefs of the Kidarite rulers. Their silver coins retain the fire altar type of their Sasanian prototypes, so it is difficult to know if this is an indication of their view towards Zoroastrianism. On one type (Q.S2-ii), one of the fire altar attendants is replaced by a vase, decorated with an ornamental band and with foliage emerging from its mouth, an Indian *purnagata* (vase of plenty). The same device appears on Kidarite-related Gandharan copper coins (Vondrovec 2014, 87–9), surmounted by a *cakra* seen from the edge. These devices are clearly related to Indian religion, representing Sri (vase) and Vishnu (*cakra*). Various other Indian religious devices appear on the Kidarite-related copper coins from Gandhara (*ibid.*, 39–44, 79–133; Khan *et al.* 2008, 104–80) suggesting that the Kidarites or their subjects were followers of Brahmanism. Among these coin designs are depictions of a goddess

Mint-metal	Type V = Vondrovec 2014	Vondrovec/Göbl	Bactrian inscriptions	Pahlavi inscriptions	Brahmi inscriptions
Gandhara gold	O.G1-i				*kirada - yosa*
Gandhara gold	O.G1-ii				*kirada - gadahara*
Gandhara gold	O.G2-i				*haṇaka - ṣaha(?)*
Gandhara gold	O.G2-ii				*yasada - gadahara*
Gandhara gold	O.G2-iii				*kirada - gadahara*
Gandhara gold	P.G1-i, -ii P.G2-i, -ii				*peroysa - gadahara*
Gandhara gold	Q.G1-i				*kidara - kuṣaṇa/ ṣa*
Gandhara gold	Q.G1-ii, -iii, -iv				*kidara - kuṣaṇa/ ala*
Gandhara gold	Q.G2-i				*samudra - gadagra*
Gandhara gold	Q.G5				*kidara/ śrī kaṣuma*
Gandhara gold	Q.G5				*kidara/ śrīkritavirya*
Gandhara gold	Q.G5				*kidara/ śrī saloṇavirya*
Gandhara gold	Q.G5				*kidara/ śrī visvama*
Balkh gold	Y-P.G1-i (¼d)		ΒΑΓΟ ΟΑΡΑΥΑΡΑΝΟ ΟΟΖΟΡΚΟ ΚΟΦΑΝΟ ÞΑΥΟ		*pe*
Balkh gold	Z.G1-i, -ii, -iii, -iv	84-1, -2, -3, -4, -6, -10	ΒΑΓΟ ΚΙΡΑΔΟ ΟΟΖΟΡΚΟ ΚΟΦΑΝΟ ÞΑΥΟ*		
Balkh gold	Z-A.G1-i	84	ΒΑΓΟ ΟΡΩΛΑΝΟ ΚΟΦΑΝΟ ÞΑΥΟ*		
Balkh gold	Z-B.G1-i, -ii, -iii	84-8, -9, -11, -12, -13	ΒΑΓΟ ΠΙΔΟΚΟ ΚΟΦΑΝΟ ÞΑΥΟ*		
Balkh gold	Z-C.G1-i	84-7	ΒΑΓΟ ΤΟΒΑΖΙΝΟ ΚΟΦΑΝΟ ÞΑΥΟ*		
Balkh gold	Z-D.G1-i	84	ΒΑΓΟ ΩΚΙΛΑΝΟ ΚΟΦΑΝΟ ÞΑΥΟ		
Balkh gold	Z-E.G1-i	84-5	ΒΑΓΟ ΩΖΜΑΝΟ ΚΟΦΑΝΟ ÞΑΥΟ*		
Balkh gold	Z-F.G1-i		ΠΙΡΩΖΟ ÞΑΥΟΝΑΝΟ ÞΑΟ*		
Balkh gold	Z-F.G1-ii	'Peroz'	ΠΙΡΩΖΟ ÞΑΥΑΝΟ ÞΑΥΟ*		
Balkh gold	Z-G.G1-i	84B	illegible		
Balkh gold	Z-H.G1-i	84A	ΒΑΓΟ ΜΗΥΑΜΟ ÞΑΟ*		
Balkh gold	Z-I.G1-i, -ii	85, 85A	ΑΔΟΜΑΝΟ ΜΙΙΡΟΣΑΝΟ ÞΑΟ*		
Gandhara silver	P.S1	5		*kdy wrhr'n ?? kwš'n MLKA**	*pe*
Gandhara silver	P.S2	1		pylwc*	
Gandhara silver	P.S3	3, 4			*peroysa ṣa*
Gandhara silver	P.S4	3A		illegible	
Gandhara silver	Q.S1	7, 8, 9, 10		*kdy wrhr'n ?? kwš'n MLKA**	
Gandhara silver	Q.S1	6		*kdy wrhr'n ?? kwš'n MLKA**	*pe*
Gandhara silver	Q.S3	11, 12			*kidara kuṣaṇa ṣa*
Gandhara silver	Q.S4	16, 17			*vara ṣa[ha]*
Gandhara silver	Q.S3-ii	18			*/buddhami*
Gandhara silver	V. 24		… ÞΑΟ*		
Gandhara silver	Q.S2-i	14			*kidara kuṣaṇa ṣa[ha]/ ṣa*
Gandhara silver	Q.S2-ii	15		/pylwc	
Gandhara silver	P.S5	19	ΠΙΟΡΟΖΟ ÞΑΥΟ		
Gandhara silver	P.S2	19A	ΚΟΦΑΝΟ ÞΑΥΟ*		
Gandhara silver	Q.S4-ii	21			illegible
Gandhara silver		12A			illegible
Gandhara silver	Q.S4-iix	13A			*śrī ?rdhasa*
Gandhara silver	Q.S5	304		illegible	
Gandhara silver	Q.S4-iix	13		no inscription	

Mint-metal	Type V = Vondrovec 2014	Vondrovec/Göbl	Bactrian inscriptions	Pahlavi inscriptions	Brahmi inscriptions
Gandhara silver	Q.S4-iix	13B			*śrī varma (?)*
Gandhara silver	Q.S4-iix V. 18B	18B			*khiga*
silver		32	TOBAZINI ÞAO*		
Gandhara copper	P.C1	2A			*peroysa*
Gandhara copper	P.C1	2A			*gadahara*
Gandhara copper		V. GC-K3			*ṣa*
Gandhara copper	Q.C1	23			*ṣa*

* indicates frequent blundering

Table 2.20 Names and titles of Kidarite rulers

holding a cornucopia and lotus and seated on the back of a lion (P.C1, Vondrovec 2014, 1 and 2A) or on a throne (Cribb 2010, 145, no. 68; Vondrovec 2014, GC-K9A, 17 and 24). She appears on the back of the Hephthalite/Alchon gold coins from Bactria, seated on a lion on the coins of Adomano (Z-I. G1-i, -ii), and on a throne on those of Mehama (Z-H.G1-i). This goddess with cornucopia and lotus seated on lion also appears on later Kashmir coins which name Kidara (Cribb 2014, 100–1; Cribb and Singh 2017) and in Kashmir sculpture (Pal 1986, fig. S103; Pal 2007, figs 63, 70–84). This goddess seems to be related to the Shaivite shrine, devoted to Śiva's consort Bhumideva, at Kashmir Smast in Gandhara where similar images appear on seals (Cribb and Singh 2017, 10). The Kashmir Smast cave and temple complex was at its most active throughout the Kidarite and Alchon Hun period (Khan *et al.* 2008; Khan 2018, 285–6), suggesting that the Kidarite Hun rulers and the local population were devotees of Indian religion, and the Hephthalite/Alchon Huns continued this form of religious devotion. The Kashmir Smast shrine was still active in the time of the Chinese pilgrim Xuanzang's visit to Gandhara as he refers to it as the mountain shrine of Bhumideva, the wife of Maheśvara (Śiva), where a natural stone image of the goddess is the object of pilgrimage from all parts of India and at the foot of the mountain is a Shaivite temple (Xuanzang 881c: Li Rongxi 1996, 79–80).

Some of the Kidarite copper coins from Gandhara also show fire altars (Vondrovec 2014, GC-K2, 7, 12, 13, 32), but it is unclear whether this is a reference to Zoroastrianism as fire altars can represent other cultic practices, even those associated with Brahmanism (cf. fire altar on gold coins of Gupta emperors Samudragupta and Chandragupta II and on silver coins of the Skandagupta, Kumar 2017, 187, 252, 357).

The Huns are often described as the destroyers of Buddhist sanctuaries (Marshall 1951, 76), but there is plentiful evidence of Buddhism continuing to flourish in the territories they controlled (Faxian, see §Y–Z.6 below). The Tope Kelan Buddhist relic deposit of the early Alchon period at Hadda (Errington 2017a, 174–91) and the Buddhist dedication copper plate featuring Mehama and other Hun kings (Melzer 2006; de la Vaissière 2007) are testimony to the continuity of Buddhism through this period (Errington 1999–2000, 201; Kuwayama 2002, 124).

Y–Z.6 Kidarites to Hephthalites: contemporaries and international contacts

During the period of Kidarite rule in Bactria and Gandhara, the Chinese Buddhist pilgrim Faxian passed through Swat, Taxila, Gandhara and Nagarahara, *c.* AD 401–2, without making a single observation about the local political situation, apart from observing the king in Nagarahara participating in Buddhist worship (858a–859c: Li Rongxi 2002, 168–77). This silence has been invoked to conclude that the Kidarites had not yet arrived in this area (Grenet 2002, 205), but the monk only describes his experience of Buddhism in the region and nothing else. A later Chinese pilgrim Song Yun does mention local kings as he was charged by the Chinese court with a diplomatic mission. He arrived in Gandhara in 520 after meeting the Hephthalite king in eastern Afghanistan the year before. He met with a warm reception from the Hephthalites, then after passing from Afghanistan into the Gilgit river route he had an equally warm welcome in Swat, but in Gandhara he met with a cruel and arrogant king who was discourteous to him and his status as envoy. This king was perhaps the Alchon Hun Mihirakula (**Fig. 2.60**), who was described as a subordinate of the Hephthalite king. He also described Mihirakula's attacks on Kashmir. Throughout his journey in Hun territory he encountered Buddhists and Buddhist monuments, so the Buddhist community continued to flourish (Kuwayama 2002, 128).

The Chinese Wei court continued to seek submission from western lands and Song Yun's pilgrimage in part sought to improve such relationships and to elicit tribute envoys from the Hephthalites and other kingdoms in the region. The Hephthalites sent tribute to the Chinese court every few years from AD 507 to 558 (Kuwayama 2002, 129). There is less evidence of their extraction of tribute from the Kidarites.

The coinage in the name of Samudragupta with a figure wearing the crown of Kidara suggests a relationship between the Kidarite Huns and the Gupta king. Such a relationship probably came late in the reign of Samudragupta as it is not mentioned in his Allahabad inscription. Some (Majumdar 1954, 57; Thaplyal 2014, 165) have tried to link the reference to the Kushan king *daivaputra ṣāhi-ṣāhānuṣāhi ṣaka muruṇḍa* in line 23 (Bhandarkar and Chhabra 1981, 213, 217–18) with Kidara, but the reference is probably to the Kushan king Shaka (see §K–N.1 above), who would have made an agreement with the Gupta king earlier

Figure 2.60 Silver drachm of Mihirakula, Hun king, issued in greater Gandhara, inscribed with his name and title 'victorious' in Brahmi script (BM IOC.2372, 3.51g, 25mm).
The king's bust is flanked by Indian religious emblems, a trident and a standard topped with a bull, both representing the Indian god Śiva. The fire altar with attendants on the reverse is based on Sasanian coin designs

in his reign. Later the Alchon/Hephthalite Huns invaded Gupta India and under Toramana (AD 485–515) ruled a large part of western India (Biswas 1973, 56–67), following earlier attempts which had been repulsed under Skandagupta according to his Bhitari inscription, *c.* 455 (Biswas 1973, 48–50; Fleet 1888, 56). The inscription refers to the invaders as *hūṇas*, repulsed in what seems to represent an extension of the Alchon Huns advance following their take over of Gandhara from the Kidarite Huns.

The relationships between the Kidarite and the Alchon/Hephthalite Huns with Sasanian Iran and China are dealt with above (§R–Y.1 – Shapur II and §Y–Z.1).

Conclusion

The issue in Tokharistan/Bactria of cup-shaped gold coins attributable to the Sasanian emperor Peroz and to the Hephthalites who defeated him marks the end of coins featuring a reference to the Kushans in their inscriptions. The last ruler to use the title Kushanshah, i.e. King of Kushan was the final Kidarite king whose name appears to be Ōzmano, (series Z-E) in the mid-5th century. This title, Kushanshah, had first been adopted by Ardashir I (series R) in the first half of the 3rd century, adapting the term Kushan used by the Kushan kings as part of their name. The only earlier use of the title Kushanshah appears on the first issue of Huvishka's subsidiary gold mint (series E.G2-i), where it seems to be a mistake by an inexperienced die engraver, copying the beginning of the inscription at its end. Later use of this title on Kushan coins are only on the gold coins of Mahi (series K. G1-i and G2-i), issued at a time when the Kushano-Sasanian kings had already adopted it, and on the coins of the usurper Meśra (series N.G1-i) who appears to have used it in the same way as the Kushano-Sasanian Kushanshahs. The disappearance of both terms Kushan and Kushanshah suggest that it had lost its meaning, first as a claim to dynastic succession back to Kujula Kadphises, and then as a claim to political control of former Kushan territory. Although both terms disappeared from coins, the coinage tradition that had been established under Wima Kadphises in the early 2nd century, and developed by these successors, continued long after their last use. Echoes of the Kushan coinage system can be found in coins issued in northern India into the medieval period (Cribb 2023b).

Throughout this chapter the evidence of coins has been employed to set out the framework of the history of the Kushan kings and their Kushanshah successors. It has presented the political implications of the numismatic evidence. The next chapter will lay out the rationale for the structure of the Kushan and successor coinages. It will focus on the coinage itself and explain how the progression of minting can be discerned from numismatic material. The catalogue which follows in Volume 2 then presents in full the coins which provide the evidence for that structure in a type corpus format.

Chapter 3
Kushan Coinage

This volume covers Kushan coinage in its broadest sense, as it includes not only the coins of the Kushan dynasty, but also of the two states, the Kushano-Sasanians and the Kidarite Huns, which followed it and claimed to succeed the Kushan kingdom. At its largest extent the Kushan kingdom, under the Kushan kings, controlled territory from southern Uzbekistan and Tajikistan through Afghanistan and Pakistan to north-western India. As the Kushano-Sasanians and Kidarite Huns took territory from the Kushan kings, their domain shrunk to a small area in the Punjab. Their territory in India was also lost as the Gupta empire rose to power.

The importance of the coins themselves as a guide to the Kushan monetary system is immense, as they represent by far the most prolific tangible evidence of the state. Their importance for understanding the use of money during the Kushan period is also essential because there are only two textual references to money from the Kushan period, both referring to a money of account, which is not obviously related to the monetary system as represented by the coinage. Both these references relate to religious donations. One, from the reign of Huvishka, is in a stone inscription recording a donation of 550 purana (meaning simply 'old [coins]') in support of Brahmins (Shrava 64; Skinner 50; Falk 2015a, 121–2) and the second is from the recently discovered record of donations to the Buddhist community by Wima Kadphises of various sums in *ka* [*kārṣāpaṇa*] (Allon 2019). Both these terms seem to relate to the silver punch-marked coinage of the Mauryan period which had already gone out of circulation long before the Kushan period. The denomination appears from these texts to be used as a money of account, surviving long after the coin it represented had disappeared. There is no evidence for its relationship with Kushan coinage. There are also two pre-Kanishka I inscriptions in Gandhari which also use the *kahapana* (*kārṣāpaṇa*) as a measure of value. One is a donative payment (CKI 43; Konow 1929, 16–17, pl. III, no. 2: *kahapa*); its date is unclear but could be in the 120s of the Azes era, so in the period of Kujula Kadphises (Cribb 2018c, 56). The other uses the term in an abbreviated form *ka* to indicate the value or weight of a silver jug as 191 *kārṣāpaṇa* found in the Taxila excavations and belonging to Jihonika, Kujula Kadphises' predecessor in Kashmir (CKI 63; Konow 1929, 81–2, pl. XVI; Marshall 1951, 156, 611; Cribb 1999a, 196–7). In the post-Kushan period the gold unit or denomination, the dinar or *dinara*, was frequently referred to in contemporary documents and will be discussed below (§C.1; §Z–Z-I). The word is derived from the Roman coinage system, within which it was the name of the standard gold unit *denarius aureus* and it may have come into use as the name for gold coins in the Kushan monetary system. This origin is also suggested by its use in the Gupta coinage system as a name for the standard gold unit.

The coinage of the Kushan dynasty extends through 13 reigns and begins with the coins of its founder Kujula Kadphises who identified himself on his coins as the 'Kushan yabgu' (Gandhari/Kharoshthi *kuṣaṇa yavuga, kuṣaṇa yavu'asa* or *kuṣaṇa ya'u'a*; Greek ΧΟΡΑΝΣΥ ΖΑΟΟΥ or ΚΟΡΡΑΝΟΥ ΗΙΑΟΥ) or simply as 'Kushan' (Gandhari/Kharoshthi *kuṣaṇa* or *oṣana*; Greek ΚΟΡΣΝ[Α]ΟΥ,

ΚΟΡΡΑΝΟΥ or ΚΟΡΣΑΝΟΥ; Bactrian ΚΟΡΣΑΝΕΙ) (Cribb 2018b). On some coins he adopted the imperial title 'king of kings' (Gandhari/Kharoshthi *maharaja rajatiraja* or Greek ΒΑΣΙΛΕΥΣ ΒΑΣΙΛΕΩΝ). Late in his reign he appears to have begun an anonymous coinage with imperial titles which continued into the reign of his son Wima Takto. Imperial titles were used by all succeeding members of the dynasty.

Wima Takto and his son Wima Kadphises did not identify themselves as Kushan on their coins, but Wima Takto was titled Kushan in the Dasht-e Nawar inscription (Skinner 6; Sims-Williams and Cribb 1995–6, 95). In the Rabatak inscription (Skinner 14; Sims-Williams and Cribb 1995–6) they were identified as the heirs of Kujula Kadphises and grandfather and father of Kanishka I who identified himself as Kushan (Bactrian ΚΟϷΑΝΟ) on his gold coins and in the Rabatak inscription. All the kings who follow him, Huvishka, Vasudeva I, Kanishka II, Vasishka, Kanishka III and Vasudeva II also call themselves Kushan in their coin inscriptions. Vasishka is also referred to as Kushan in the Kamra inscription (CKI 230; Skinner 188), which also mentions the birth of his son Kanishka III. The traces of Bactrian inscriptions on the coins of the next kings Mahi and Shaka also contain the Kushan designation. It is missing from the coins of Kipunadha, the last king who is identified here as a member of the Kushan dynasty. These last kings are considered to be Kushan because they issue coins in direct succession to the earlier kings who identified themselves as members of the dynasty, using the same coin designs and the same mints. One of the kings included here, Meśra, is probably not a Kushan, but included the designation Kushan in his blundered Bactrian coin inscription. He appears to have taken over a Kushan mint for a period, but seems unlikely to be a member of the dynasty as he represented himself on both his gold and copper coins in non-Kushan dress and holding a *cakra* standard.

Two kingdoms which captured part of Kushan territory adopted the title 'Kushanshah' to articulate their authority, but were clearly not part of the Kushan dynasty. The seven Sasanian princes, known in modern scholarship as the Kushano-Sasanians: Ardashir I, Ardashir II, Peroz I, Hormizd I, Hormizd II, Peroz II and Varahran, ruled Bactria and, later, territory south of the Hindu Kush as far east as Gandhara on behalf of the Sasanian emperor. They copied aspects of Kushan coin design and identified themselves on their coins as Kushan kings, in Bactrian ΚΟϷΑΝΟ ϷΑΥΟ and in Pahlavi as *kwš'n MLKA*. They ruled as contemporaries of the Kushans from the period of Kanishka II, and initially made imitations of Kushan coins as well as their own issues. In the reigns of the last Sasanian Kushanshah Varahran and of the last Kushan king Kipunadha, a group of Huns, known in the ancient world as the Kidarite Huns (Ουννοι οι Κιδαριτοι) after their third and most important ruler Kidara, took over Bactria and Gandhara, but the Sasanian emperor Shapur II managed to keep the territory around Begram and Kabul under direct Sasanian control. Initially the Kidarite rulers Kirada, Peroz and Kidara acknowledged the last Kushano-Sasanian king on their coins, but under Kidara they began to identify themselves on their coins as Kushanshah in Bactrian and Pahlavi and on some coins *kuṣaṇa ṣaha* in Brahmi. In Gandhara they were succeeded by the Alchon Huns who no longer used the Kushanshah title or Kushan coin designs. In Bactria five more Kidarite rulers Orōlano, Pidoko, Tobazino, Ōkilano and Ōzmano continued to use the Kushanshah title and to issue the gold Kushano-Sasanian style coins based on Kushan designs. In the mid-5th century the Kidarites were ousted from Bactria by the Sasanian emperor Peroz who issued gold coins based on the late Kidarite issues, but without the title Kushanshah. In turn he was ousted from Bactria and there followed two more issues of gold coins in the same style, but also without the Kushanshah title, after which the coinage system initiated by the Kushans came to an end in Bactria. In the former Kidarite territory south of the Hindu Kush gold coins based on the Kidarite version of the Kushan coinage continued to be made, particularly in Kashmir and in the Punjab until the 8th century (Cribb 2016b; Deyell 2017). Kushan gold coin designs also continued to influence gold coinage in the Gupta empire and the later kingdoms of Samatata (Bose and Nasir 2016, 142–76) and Kashmir (Mitchiner 1979, 34–9).

A–B Coinage of the transitional phase (Fig. 3.1)

Kushan coinage began as a transition from the coinages of earlier dynasties before it gradually settled into a coherent and consistent structure. The transitional phase lasted through the reigns of Kujula Kadphises, founder of the Kushan empire, and of his son Wima Takto. The numismatic evidence of the establishment of Kushan rule taking place during the reigns of Kujula Kadphises and Wima Takto presents a very complex system as local coinages were initiated in response to the existing currencies of the conquered territories. The continued circulation of the existing currencies occurred in some regions, but the limited number of hoards available for study make it hard to establish any details. At sites north of the Hindu Kush the silver 'Heraus' coinage and the copper imitation Heliocles coins follow rare silver imitations of Greek issues, suggesting a very limited use of currency before the Kushan conquests. At Begram and Taxila some of the earlier local issues of Begram, the previous copper imitation Hermaeus coins and Gondophares coins seem to have survived in circulation alongside Kujula Kadphises' imitation Hermaeus coins. At Taxila several excavation contexts at Sirkap contained Kujula Kadphises coins with Azes II copper coins and base-silver imitation Azes II (Marshall 1951, 792), suggesting that they stayed in use through Kujula Kadphises' occupation of the city. His currency for Taxila also circulated into Swat (Göbl 1976; MacDowall and Callieri 2004), and to a lesser extent into Gandhara (Ali *et al.* 2004). Kujula Kadphises' coinages in Begram and Taxila were also supplemented by the circulation of a series of imitation coins, apparently made in Akra for use in Kushan territory (§A.4). In Kashmir the bull/lion coins of Zeionises/Jihonika continued in use alongside Kujula Kadphises' and Wima Takto's bull/camel coins (Senior 2006, 118). The silver coinage for Sind issued during Kujula Kadphises' incursion into that region circulated alongside the local Indo-Parthian coins (Cribb 1998a).

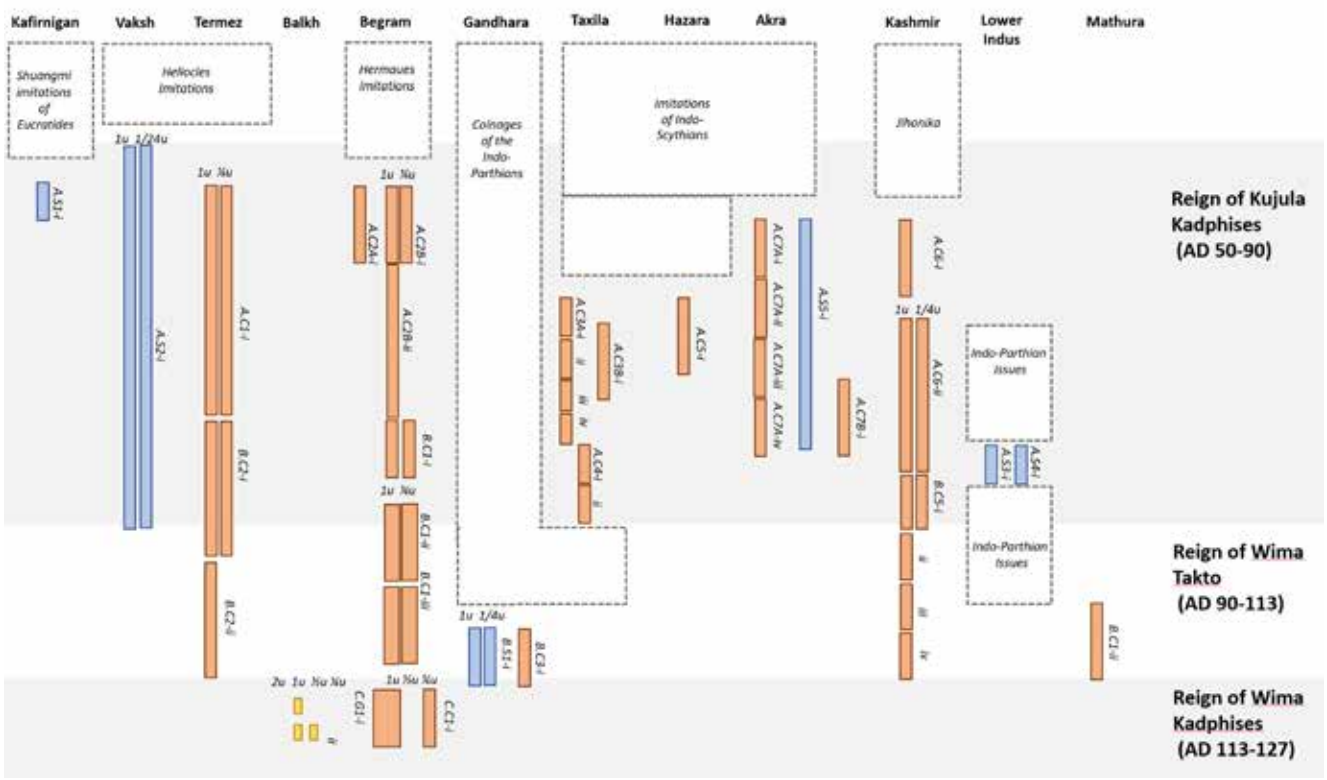


Figure 3.1 Minting diagram showing silver and copper issues under Kujula Kadphises and Wima Takto and their relationship to contemporary coinages of other dynasties

At the end of Kujula Kadphises' reign there seems to have been a break in Kushan rule in Taxila, when the city was captured by the Indo-Parthian king Abdagases and his Apracaraja ally Aspavarma. This brought the issue of his coins to an end in the city, but not necessarily their use. When the city was reconquered under Wima Takto, the Soter Megas coins of Begram arrived with the Kushan army and replaced all previous local currency. The local Soter Megas coins issued under Wima Takto for Gandhara, Mathura and Bactria did not last long, as they were few in number and were apparently replaced by the extension of the circulation of his Begram coins to most parts of his empire. Issued in very large numbers and circulated in territories which had previously experienced a progressive debasement, the Soter Megas coins from the Begram mint gradually eliminated the circulation of earlier coins, a transition which foreshadowed the monetary reform initiated under Wima Kadphises (see §C.2 below). In Kashmir, the only area where Kujula Kadphises' and Wima Takto's earlier coinage had been stable, coins at half the weight of the standard Soter Megas unit were introduced to make the local coinage conform to the Begram standard. In spite of the successful standardisation of the coinage, there is limited evidence from hoards that the Soter Megas coinage did not long survive in currency following the changes to the coinage system in the next reign.

A.1 Kujula Kadphises, first Kushan ruler, c. AD 50–90

When the first Kushan emperor Kujula Kadphises rose to power there was little coinage in his own realm in Bactria/Tokharistan, where he ruled as the Da Yuezhi Kushan yabgu (Cribb 2018b). As he extended his campaign of conquest over the other four Da Yuezhi yabgus and territories south of the Hindu Kush he took control of regions where coinage was a well-established component of the local markets and fiscal systems. His administration adapted the coinages of these conquered domains to create its own coinages, sometimes making direct copies, sometimes introducing novel design elements following the tradition of coin design in the region, but always within the framework of pre-existing coinages. Apart from the two peripheral regions of Wakhsh and the Indus, the pre-Kushan coinage had been heavily and recently debased. The Indo-Greek, Indo-Scythian and Indo-Parthian coinages, issued south of the Hindu Kush before the Kushans, were based on silver and copper denominations, but the silver content had been replaced by copper and the copper denominations were reduced in weight, or in some areas debased with lead.

Kujula Kadphises' original domain, as the Da Yuezhi state's Kushan yabgu, was in the Wakhsh valley, in south-western Tajikistan. At the time of his rise to power he probably also controlled areas south of the river Amudarya (Oxus) in north-eastern Afghanistan. His base territory can be identified by the finds of his early silver coinage in this region and from the descriptions of the area of Bactria/Tokharistan where he came to power and then ruled in the Chinese chronicles, the *Han Shu* (Hulsewé and Loewe 1979, 119–23) and the *Hou Han Shu* (Hill 2009, 28–9). The *Han Shu* also indicates where the other Da Yuezhi yabgus were based in Bactria/Tokharistan: the Xiumi yabgu in the northern reaches of the river Wakhsh valley (in Tajikistan), the Shuangmi yabgu in the northern reaches of the river Kafirnigan valley (in Tajikistan), the Xidun yabgu in its southern reaches, and the Dumi yabgu in the Surkhandarya valley (in south-eastern Uzbekistan). The Dumi and the

Figure 3.2 Silver coinage of Kujula Kadphises in Tokharistan (A.S1 and A.S2)
Silver coinage based on the coinage of the Graeco-Bactrian king Eucratides I (*c.* 170–140 BC), were issued in Bactria/Tokharistan under Kujula Kadphises. Both tetradrachms and obols were issued (A.S1 and 2). This coinage replaced the silver imitation coinages which had previously been issued by the Da Yuezhi.
a–b) Silver tetradrachm (a) and obol (b) issued by the Da Yuezhi in imitation of Attic standard silver coins of Eucratides I, these were the prototypes for Kushan silver coinage in northern Bactria, 1st century AD (1880,0805.2, 13.92g, 30mm; 1987,1111.83; 0.52g, 10mm)
c) Silver obol in the name of Kujula Kadphises, with designs copied from imitations of the obols of Eucratides I, *c.* AD 50 (A.S1-i: 1 1890,0404.22, 0.55g, 11mm)
d–e) Silver tetradrachm (d) and obol (e) issued under Kujula Kadphises, with the name Kushan and the title 'ruling yabgu'. Due to a misreading of the inscription these have been misattributed to a non-existent ruler Hera[i]us, so are often referred to as 'Heraus' types (A.S2-i: 8 1994,0711.2, 14.59g, 29mm; 15 1890,0404.9, 0.55g, 11mm)

Xidun yabgus, like the Kushan yabgu, probably also controlled areas to the south of the river Amudarya. The locations indicated here are based on Grenet's (2006) interpretation of the Chinese sources, but there are other opinions on their location (Hill 2009, 318–49; Yu Taishan 2014, 165–7; Falk 2015a, 75–8; 2018).

A.2 Kujula Kadphises' silver coinage (Fig. 3.2)

The two regions where the debasement process had minimal effect were at the northern and southern extremes of the empire. The first of these was in the north-eastern territory, the Kushan yabgu's original domain in the Wakhsh valley, where Kujula Kadphises' administration adapted the Eucratides imitation silver coinage also used by other Da Yuezhi yabgus (Staviskii 1986, 135; Gorin in Falk 2015a, 76). The other was in the extreme south-east in Sind, where the local mint copied types issued by the local Indo-Parthian rulers (Senior 2001, types 245, 250–2).

Silver Attic tetradrachms (A.S2-i 1u) and obols (A.S2-i 1/24u) were issued in the north, but on a reduced version of the Attic drachm standard. The coins were slightly debased,

but still of silvery appearance. The denominations were copied from the silver coins imitating issues of the Greco-Bactrian king Eucratides I current in Da Yuezhi territory. The silver imitations of Eucratides (Senior 2001, vol. 2, 218, type A19) show randomness in their choice of prototypes, suggesting their unofficial nature, so it is likely that they began before Kujula Kadphises' reign. One example bears part of the name of Kujula Kadphises (A.S1), so the imitations must have continued into his reign. A trade hoard described by Senior (2001, vol. 2, 218, n. 2) containing a mixture of imitation Eucratides and 'Heraus'-type tetradrachms suggests that the introduction of Kujula Kadphises' 'Heraus' coins did not eliminate other forms of coinage from circulation. Their distribution shows them being issued in various places north of the Amudarya river, particularly in the Kafirnigan and Wakhsh valleys. The denominations of these imitations are the same as those of the 'Heraus' coinage, so they seem to provide the prototype for it, and in the Wakhsh valley probably represent the coinage before Kujula Kadphises.

One so-far unique coin used the designs of the imitation types, but was inscribed with the name of Kujula Kadphises in Greek letters ΚΟΖΟΥΛΟ on the reverse (A.S1-i 1/24u). It may have been issued in the former Shuangmi yabgu's territory. The 'Heraus'-type coins (Cribb 1993), issued in Kujula Kadphises' own domain, retained the Eucratides imitations' use of an obverse portrait, but now with the Kushan yabgu's features, surrounded by a reel and pellet border, as used on Bactrian Greek coins. The reverses mixed the Greek prototype's arrangement of the Greek inscription with the equestrian portrait of the king crowned by a winged Victory design derived from the Gandharan coinage of the Indo-Parthian king Gondophares (Senior 2001, type 216) for the tetradrachm (type A.S2 1u) and a standing ruler design derived from the Kashmir coinage of Indo-Scythian satrap Zeionises/Jihonika (Senior 2001, type 132) for the obol (type A.S2 1/24u). The portrait type is very similar to those discovered on the sculptures of the king and royal princes at the royal sanctuary at Khalchayan (Pugachenkova 1971; Mode 2013). These silver issues appear to have commenced early in Kujula Kadphises' reign and circulated in the Kushan yabgu's original territory between the Wakhsh and Panj rivers and continued through his reign as an extensive issue (see Ch. 2 §A.2). In the inscription Kujula Kadphises is identified simply by his title, ΗΙΑΙΟΥ ΚΟΡΣΑΝΟΥ or ΗΙΑΟΥ[Σ] ΚΟΡΡΑΝΟΥ (Kushan yabgu) on the obols, and ΤΥΡΑΝΝΟΥΝΤΟΣ ΗΙΑΟΥ ΚΟΡΡΑΝΟΥ (the ruling Kushan yabgu) on the tetradrachms. These coins are known to modern scholarship as 'Heraus' or 'Heraus Sanab' coins based on a misreading of these inscriptions, which continues to cause much confusion in their attribution (see §A.2.1 below).

The second region to issue silver coins under Kujula Kadphises was his most southerly conquest, in the Indus region. Here the administration adapted the local silver Indian standard drachm currency used by the satrap Nahapana and his Indo-Parthian neighbours. These coins (types A.S3 and A.S4) are very rare and difficult to read, but make use of imperial titles ΒΑΣΙΛ[ΕΩΣ ΒΑΣΙΛΕΩΝ] (king of kings) and *maharaja rajatiraja* (king, king of kings), inherited from the Indo-Parthians. On some examples the king is identified, as in the far north by his title, Gandhari *koshana* or *oshana* (A.S3) or Greek ΚΟΡΣΑΝ (A.S4). The designs used, portrait bust on obverse and goddess on reverse, are derived from the local Indo-Parthian and Indo-Scythian issues.

The dating of Kujula Kadphises' silver coins within his reign remains uncertain. The single silver coin of the imitation type may be one of the earliest and represent the final issue of imitation Eucratides coins in the territory of the Shuangmi or Kushan yabgus, but little weight can be placed on just one coin. With regard to the 'Heraus' types, their denominations and arrangements of inscriptions follow the imitation Eucratides coins, whereas the reverse design and the placing of letters within the pictorial design are derived from the coinages of the Indo-Parthians (Senior 2001, type 216) and Indo-Scythians (*ibid.*, type 132) south of the Hindu Kush immediately before Kujula Kadphises' coins there. The obverse design functioned in the same way as both Greek and Indo-Parthian prototypes, although stylistically closer to Indo-Parthian imagery. Overstrikes and continuity of issue place Kujula Kadphises' coins issued south of the Hindu Kush immediately after the issues of Indo-Parthian Gondophares and Indo-Scythian Zeionises (§A.5) both of which provide the prototypes for the 'Heraus'-type reverse designs. This suggests that the 'Heraus'-type coins were issued after Kujula Kadphises had begun his campaigns into Indo-Parthian and Indo-Scythian territory. Gondophares can be dated by the Takht-i-Bahi inscription (CKI 53) naming him and giving his regnal date year 26 equal to Azes era year 103. Taking the Azes era to have begun in 46 BC (Cribb 2005a, 214), the inscription can be dated to AD 57 and the start of Gondophares' reign can be placed in AD 32, but the prototype coinage is likely to be a little later, as it is an innovative design for Gondophares. If the 'Heraus' coinage began close to the start of the reign of Kujula Kadphises *c.* AD 50 it would be compatible with that evidence. Zeionises was ruling until his territory was captured by Kujula Kadphises, who copied his coins (Senior 2001, type 133; 2006, 118; §A.3), so a similar result also emerges. There are no other indications of the dating of the reign of Zeionises. The *Hou Han Shu* implies that Kujula Kadphises' conquests south of the Hindu Kush followed his destruction of the other yabgus, so his administration's direct encounters with Indo-Parthian and Indo-Scythian coins followed the commencement of his reign, perhaps by a few years, but of course it cannot be discounted that his mint masters may have already had familiarity with the coins of Gondophares and Zeionises before the conquests.

The southern silver coins can be dated by the context of their circulation alongside late Indo-Parthian coins and their issue at the farthest and perhaps the latest extent of Kujula Kadphises' conquests. The most significant find of these coins was of three examples in a hoard of Indo-Parthian coins at Sirkap, Taxila (Marshall 1951; Turner and Cribb 1996; Cribb 1998a). There are two separate issues of this coinage, one (A.S3) with winged Victory (Nike) and the other (A.S4) with Good Fortune (Tyche), both apparently from late in his reign, as they are close in time to the issues of Sasan (Senior 2001, type 245) in the same series.

A.2.1 Attribution of the 'Heraus' coinage

The 'Heraus'-type coinage (A.S2) continues to present problems relating to its attribution and chronology. Doubts about its attribution to Kujula Kadphises stem from a tendency to place it earlier than his reign and to attribute it to another Kushan ruler or rulers before, or contemporary with, Kujula Kadphises (Mukherjee 2004, 7–8, 30; Widemann 2009, 403–6; Francfort 2013, 1547; Falk 2015a, 85–6; Sinisi 2017, 820–1; Taasob 2016; 2019; Rezakhani 2017, 54–6).

The dating of these coins to the second half of the 1st century BC by Cunningham (1888, 51; Bernard 1980, 316) or to the early 1st century AD as more recent scholars propose (Staviskii 1986, 137; Rapin 2007, 62–3; Taasob 2016; 2019) reflects the attribution of these coins to a Kushan ruler before Kujula Kadphises. The arguments for such attributions and chronologies, however, fail to take account of the structure of the coinage systems in the period of Kujula Kadphises.

The chronological position of the 'Heraus'-type coinage is indicated by its relationship with the Soter Megas coinage, which began late in the reign of Kujula Kadphises and continued into the reign of his son Wima Takto (Cribb 2014; see §B.1 below). The Soter Megas coinage followed Kujula Kadphises' extensive coinages issued at various locations across his southern territories. North of the Hindu Kush, however, the Soter Megas coinage is only preceded in the territories ruled by Kujula Kadphises by three coinages, two being imitations of coins of the Bactrian Greek kings: of Eucratides I in silver (A.S1-i) and of Heliocles I in copper (A.C1-i), and the third being silver 'Heraus'-type coins (A.S2-i) (Staviskii 1986, 135; Gorin in Falk 2015a, 74–7). These coinages can be attributed to the reign of Kujula Kadphises because attributing them to an earlier period would create an implausible several decades' long cessation of coinage north of the Hindu Kush during Kujula Kadphises' reign. The archaeology makes it clear that they were all current until replaced by Soter Megas coins.

The attribution of these coins to the reign of Kujula Kadphises also rests on the structure of the relationship of their designs with the Bactrian Greek, Indo-Parthian and Indo-Scythian prototypes described above (§A.2) and with a copper issue at Kujula Kadphises' Kashmir mint (A.C6-i) which combines the 'Heraus'-type designs with an inscription naming Kujula Kadphises.

The inscription arrangement on the 'Heraus'-type coins follows the structure of the Eucratides silver coins imitated by Kujula Kadphises' predecessors in northern Bactria/Tokharistan, and also suggests their attribution to his reign. There were two denominations: tetradrachms and obols. The Greek prototype obols were inscribed with only two words: the ruler's name and title, ΒΑΣΙΛΕΩΣ ΕΥΚΡΑΤΙΔΟΥ (of king Eucratides), to right and left of the main design. The prototype tetradrachms added a third word, an epithet, ΜΕΓΑΛΟΥ, meaning 'great' (with genitive inflection like the name and title). The 'Heraus'-type coins copy this structure and the name and title on the obols are HIAOY KOPPANOY on most coins, but written more carefully on some as HIAIOY KOPΣANOY. The positioning of these words on the 'Heraus'-type obols, when compared with the prototype, makes HIAOY the title and KOPPANOY the name. On the tetradrachms the added word is TYPANNOYNTOΣ, an adjectival form (participle) of the verb τυραννω meaning 'to rule', so translatable as 'ruling' (as used by Diodorus Siculus, Βιβλιοθήκη Ἱστορική 22.7.6). The structure of the tetradrachm inscription places KOPPANOY in the position where the Greek prototype placed the name ΕΥΚΡΑΤΙΔΟΥ and places TYPANNOYNTOΣ HIAOY where the prototype placed the title and epithet ΒΑΣΙΛΕΩΣ ΜΕΓΑΛΟΥ. The structure of the inscriptions on the tetradrachms therefore again positions HIAOY as a title and not a name and gives the issuer's name as KOPPANOY, i.e. Kushan.

Between and before the horse's legs on the reverse of the 'Heraus'-type tetradrachms there are additional Greek letters, often interpreted as words or names: ΣΑΝΑΒ, ΣΑΝΑΒΟΥ or ΑΝΤΕΙΧ (see below). On some examples the N in ΣΑΝΑΒ is reversed and the N in ΣΑΝΑΒΟΥ is on its side as a Z. The letters or words are written with smaller letters than the main inscription and occupy the same place as the Kharoshthi control marks on the prototype coins of Zeionises and Gondophares (Senior 2001, Zeionises type 132; Gondophares type 216) and as the Greek control mark NA placed between the legs of the horses of the Dioscuroi on the Eucratides imitation silver tetradrachms (Senior 2001, 218, type A19.1), which provided the prototype for the 'Heraus'-type coinage in northern Bactria/Tokharistan. Furthermore, on the copper 'Heraus' type the Kharoshthi control mark *bu* sits in the same place as the Greek B or BOY on most of the 'Heraus'-type silver tetradrachms. The Greek letters among the horse's legs are therefore more likely to be control marks, in keeping with general mint practices in this period.

This analysis of the structure of the designs and their relationship with their prototypes suggest that the coins refer not to a ruler called 'Heraus' but to one called 'Kushan' with the title HIAOY, likely a version of yabgu. HIAOY, i.e. ēiaou, probably pronounced 'yaou', can be understood as an attempt to render the Chinese title *xihou* in Greek (Cribb 2018b, 12). A similar transcription into Gandhari as *ya'u*[*a*], and a parallel transcription into Greek as ZAOOY, can be seen on Kujula Kadphises' Taxila (A.C4-i) and Hazara region coins (A.C5-i). The lack of clarity in the transcriptions of unfamiliar consonants can be seen in the rendition of the consonant in Kujula Kadphises' name as *y* or *j* in Gandhari and as *z* in Greek and Bactrian (Cribb 2018b, 14).

Other evidence suggests that a ruler calling himself 'Kushan' should be Kujula Kadphises (see Ch. 2 §A.4). There are three inscriptions from his reign: two Buddhist dedications in Gandhari (Skinner 1 and 4; CKI 59 and 60) which name him only in this way, and the Epigraphical Hybrid Sanskrit inscription on his son's Mat portrait sculpture (Skinner 7; Shrava 2) which refers to his father as 'Kushan' (Ch. 2 §A.1 and §A.4). Some other coin inscriptions also designate him simply as 'Kushan' without his personal name (A.S3, A.S4), so the 'Heraus'-type coins are not alone in naming Kujula Kadphises in this way.

The numismatic context of the 'Heraus' type place them in the reign of Kujula Kadphises; the coin inscriptions name the issuer in the same way as other coins and inscriptions

designate Kujula Kadphises. The copper coins which commence Kujula Kadphises' coinage in Kashmir (A.C6-i) have the same designs and Greek inscription as the 'Heraus'-type coins, but also identify the issuer using his personal name in Gandhari/Kharoshthi. Separating the 'Heraus'-type coins from the reign and authority of Kujula Kadphises therefore runs contrary to a broad range of independent lines of evidence.

The most recent dissenting view takes a slightly different approach to these coins. Taasob (2016; 2019), based on a die study performed in her thesis, has argued that the coins belong to the period of Kujula Kadphises but were issued by subordinate rulers between *c.* AD 20–50:

> The evidence from this study suggests that Heraios coinage series were issued in different phases of production by the head of the four yabgus, HIAOY, ΣANAB, ΣANABOY and ANTEIX who were perceived as 'allied princes', in Bactria. The clan identity as an ethnic affiliation, obviously not a personal name, was clearly attested on the coins as KOPPANOY. It is therefore likely that power was granted to these local princes to coin money in Bactria to keep the political dominance of the Kushan in the north Oxus (Taasob 2016, 293).

The usage of Kushan as a state or territorial appellation by some modern scholars and by the successors of the Kushan dynasty should not distract us from the fact that all of the evidence from Kujula Kadphises' time treats it as if it was a name, as discussed above (§A.2). The sets of letters ΣANAB, ΣANABOY and ANTEIX, written on the coins in an inferior size to the rest of the inscription, should not be used to prompt the invention of new rulers in the same way that the unfamiliar word HIAOY prompted early commentators to create a ruler called Heraus (Cunningham 1862; Gardner 1874; 1886, xlvii–xlviii) or Miaus (Cunningham 1888), i.e. because they constitute something unrecognisable, therefore they can only be rulers' names. As shown above they appear to represent abbreviations of the names of officials at the mint or in charge of the mint in line with contemporary practice. Taasob's attribution to the other four yabgus also lacks plausibility, as the only surviving historical account of them stated that Kujula Kadphises did not subordinate them, but fought and destroyed them (*Hou Han Shu* 118.9a: Zürcher 1968, 367; Hill 2009, 28–9; Falk 2015a, 85).

Taasob's die study (2016) presents no evidence of separate mints or authorities overseeing the coinage, only the expected change of die-engraving personnel and mint officials over time. The die study by Cribb (1993, 111–14) published 58 coins with 31 obverse dies with no links between them. Taasob's die study presented 87 coins also struck from 31 obverse dies, presenting two links, but our re-examination of this die study shows there are 50 obverse dies, but no die links. So neither die study reveals an order for the coins, other than that deducible from the progression indicated by their deteriorating inscriptions, where letters are progressively miswritten and miscopied by later die engravers (Cribb 1993, 109–10). The changing letters between the legs of the horse could also indicate changes in the administration of the mint over time. Both studies utilise too small a number of coins to draw any conclusions about the organisation of the mint. In cases where die-study data have allowed the reconstruction of minting procedure, such as the gold coinages issued under Wima Kadphises (Bracey 2009) or Huvishka, on average 10 or more coins have survived per obverse die, i.e. the n/d = 10+:1 (n/d representing the ratio of the number of coins to the number of dies). In both Cribb's and Taasob's die studies the ratio of dies to coins is very low, with n/d of 1.87:1 and 1.74:1 respectively, so that no conclusions can be drawn. The estimation of the number of dies, based on the currently available coins, suggests that significantly less than half the dies have been so far recorded (using the formula proposed by Esty 2011, 46).

The absence of any of the words ΣANAB, ΣANABOY and ANTEIX from the obol coinage also argues against the 'Heraus'-type coins being issued by four different sub-rulers. Taasob has suggested that the 'Heraus' obol coinage was issued between AD 50 and 90, following cessation of the issue of 'Heraus'-type tetradrachms (Taasob 2016, 172). This proposal is also implausible as it creates the curious anomaly of a silver coinage of imitation Eucratides tetradrachms and obols being replaced from c. AD 20/30 to 50 by a coinage of only tetradrachms and then from AD 50 to 90 by a coinage of only obols.

The context of the 'Heraus'-type coins still points to their attribution to the reign of Kujula Kadphises.

A.3 Kujula Kadphises' copper coinage (Figs 3.3–3.10)

Copper coins were current both north and south of the Hindu Kush during Kujula Kadphises' reign. In the north Kujula Kadphises issued a copper coinage in place of the currency of reduced Attic standard silver tetradrachms and drachms, imitating the issues of the late Greco-Bactrian king Heliocles, with Zeus on the reverse. Under Kujula Kadphises' administration these imitations (A.C1) were reduced to copper denominations, eliminating the circulation of earlier debased silver imitations. The transition to copper denominations appears to reflect the impact of the copper-based currencies circulating in Kujula Kadphises' southern territories. Find spots show these copper coins circulating in the territory previously under the control of the Dumi yabgu, based in the Termez region (see Ch. 2 §5), and controlling the Surkhandarya river valley. Although imitations, these copper coins were a unified official currency with a single prototype with the Greek monogram composed of A within Π (Bopearachchi 1991, 222, monograms M and N, 223, nos 7–10), suggesting a continuous series from a single mint, rather than a random copying like the earlier silver imitations by pre-Kushan statelets. They differ only in the style of the die engraving, which shows a progressive corruption of the inscriptions, consistent with the normal progression of engravers at the mint. Many more tetradrachms have been reported than drachms. Towards the end of Kujula Kadphises' reign these were replaced by a new issue with a horse replacing Zeus on the reverse (B.C2), sharing the tamga of the Soter Megas coinage, so will be discussed below.

South of the Hindu Kush, Kujula Kadphises' administration issued coins in three main areas: Begram, Taxila and Kashmir, with a subsidiary region represented

Figure 3.3 Copper coinage of Kujula Kadphises in Tokharistan (A.C1-i)
Copper imitations of the silver coinage of the Graeco-Bactrian king Heliocles I (*c.* 125–90 BC) were issued in Bactria/Tokharistan during Kujula Kadphises' reign. Both tetradrachms and drachms were issued.
a) Silver Attic standard tetradrachm of Heliocles I, prototype for the copper series (1993,1106.26, 16.09g, 35mm)
b–c) Copper tetradrachm and drachm issued under Kujula Kadphises imitating the silver coinage of Heliocles I, with a blundered version of the inscription naming Heliocles I (A.C1-i: 40 OR.5996, 13.95g, 29mm; 45 OR.289, 3.05g, 17mm)

by coins first published from examples found in the Hazara District (Smith 1898). The Taxila issues also circulated in the Swat valley (Göbl 1976, 60–2, nos 77–140; MacDowall and Callieri 2004, 832, nos 32–4). Alongside these issues an entirely imitation coinage circulated within Kujula Kadphises' territory, based on issues of Azes II and on the Kushan imitations of Hermaeus, apparently made in Akra (A.C7A, A.C7B, A.S5).

The coinage of Kashmir was based on the copper coinage of Zeionises/Jihonika, the last Indo-Scythian ruler of the region, issued in two denominations: a copper unit of *c.* 9-11g, with a quarter weighing *c.* 2.5g. Anecdotally Zeionises/Jihonika's and Kujula Kadphises' bull and camel coins are most frequently found in Kashmir (Senior 2001, vol. 1, 96; Shah 2012–13, 219). The first issue (A.C6-i) used the portrait/horseman design of Kujula Kadphises' silver tetradrachm coinage for the Wakhsh valley, but this was immediately replaced by an issue (A.C6-ii) using designs adapted from Zeionises' coinage, replacing his bull/lion coins with Kushan bull/camel coins. Like his lower Indus issues, these coins give Kujula Kadphises imperial titles *maharayasa rayatiraya*[*sa*] *devaputrasa kuyula katakapasa* (of king, king of kings, son of the gods, Kujula Kadphises) or royal titles *maharajasa mahadasa kushanasa kuyula katakaphsasa devaputrasa* (of king Kushan, Kujula Kadphises, the great, son of the gods). The obverses of the bull/camel coin have a blundered Greek inscription copied from the coins of Zeionises.

Figure 3.4 Copper coinage of Kujula Kadphises in Kashmir (A.C6)
Copper coins were issued in Kashmir under Kujula Kadphises on the same standard as the coins of the Indo-Scythian Zeionises (Jihonika), *c.* AD 30–60, who ruled Kashmir before the Kushans. The first issue (A.C6-i) adapted the design of Kujula Kadphises' silver coinage in Tokharistan (A.S2), but subsequent issues (A.C6-ii) were based more closely on the local issues of Zeionises.
a) unit of Zeionises (1894,0506.1808,10.68g, 24mm)
b) unit in name of Kujula Kadphises, with design based on his Tokharistan silver issues (A.C6-i: 210 1894,0506.1724, 10.42g, 23mm)
c–d) unit (c) and quarter (d) in name of Kujula Kadphises, adapting the designs of Zeionises (A.C6-ii: 239 1855,0608.12, 9.09g, 23mm; 248 1894,0506.1850, 2.71g, 16mm)

The coinage of Begram and Taxila share a common origin, commencing in Begram, adapting that region's copper Indian standard tetradrachms and drachms imitating the debased Indo-Scythian imitations of silver issues of the Indo-Greek king Hermaeus (Dobbins 1970; 1972). There had been a progressive degeneration of the imitation Hermaeus coinage under previous non-Greek, probably Indo-Scythian (Senior 1999; Cribb 2021), rulers which had already reduced it to a silver-free copper denomination system before Kujula Kadphises added the region to his conquests. The Kushan issues (types A.C2A and A.C2B) were normally tetradrachms, but one drachm has been recorded (A.C2B-i 1/4u). Two versions of the imitation Hermaeus coins were issued in the name of Kujula Kadphises. One issue (A.C2A) used a misspelt adaptation of the original Greek inscription of Hermaeus ΒΑΣΙΛΕΩΣ ΣΤΗΡΟΣΣΥ ΕΡΜΑΙΟΥ (of king Hermaeus, the saviour) on the obverse. The other (A.C2B) used various versions of an

Figure 3.5 Copper coinage of Kujula Kadphises at Begram, two production centres (A.C2A and A.C2B)
Copper coins were issued at Begram under Kujula Kadphises in two parallel production centres, mostly as tetradrachms of *c.* 9g. The design of a royal bust and standing Heracles adapted the royal bust and Zeus designs of the Indo-Scythian coins of the region, which were imitating the Indian standard silver tetradrachms of the Indo-Greek king Hermaeus (*c.* 100–80 BC). The two production centres are distinguished by whether Kujula Kapdhises is named in the Greek inscription. Drachms of Kujula Kadphises, not pictured, are only known from one example (A.C2B-i)
a) tetradrachm in name of Hermaeus, an Indo-Scythian imitation on which the Kushan coins are based, *c.* AD 10 (IOC.143, 9.11g, 24mm)
b) tetradrachm with a blundered Greek inscription naming Hermaeus, only the reverse Kharoshthi inscription names Kujula Kadphises (A.C2A-i: 49 1922,0424.3003, 8.79g, 23mm)
c) tetradrachm, with both Greek and Kharoshthi inscriptions naming Kujula Kadphises, these coins often feature Kharoshthi control mark(s) on the reverse (A.C2B-i: 80 1847,1201.76, 9.13g, 22mm)
d) tetradrachm of the second phase, these are distinguished by the inscriptions which replace the first phases obverse Greek inscription with Bactrian (A.C2B-ii: 86 1922,0424.2976, 9.32g, 25mm)

Figure 3.6 Copper coinage of Kujula Kadphises at Taxila, two production centres (A.C3A and A.C3B).
Copper tetradrachms, based on his issues at Begram, were issued under Kujula Kadphises from two production centres at Taxila. One series are copies of Begram series A.C2A, the other are copies of Begram series A.C2B, both with blundered Greek inscriptions – production centre A naming Hermaeus and centre B naming Kujula Kadphises. The first series is produced in several phases which have increasingly crude designs and show a falling weight standard. They are distinguished by small details in the design.
a) tetradrachm of the first phase of centre A (A.C3A-i: 97 1835,0901.4, 7.46g, 23mm)
b) tetradrachm of the second phase of centre A, distinguished by diadem ribbons to the right and left of the head of Heracles on the reverse (A. C3A-ii: 113 1853,0301.1274, 7.75g, 23mm)
c) tetradrachm of the third phase of centre A distinguished by a royal portrait wearing Heracles' lionskin, usually visible simple as small marks representing the lion's paws below the bust (A.C3A-iii: 115 1845,0613.29, 9.13g, 20mm)
d) tetradrachm of the fourth phase of centre A is noticeably cruder and lighter than the previous phases (A.C3A-iv: 121 1922,0116.31, 3.70g, 17mm)
e) tetradrachm minted at centre B distinguished by a blundered Greek inscription in the name of Kujula Kadphises with Kharoshthi control mark *ha* on reverse (C3B-i: 134 1956,0409.168, 4.76g, 19mm)

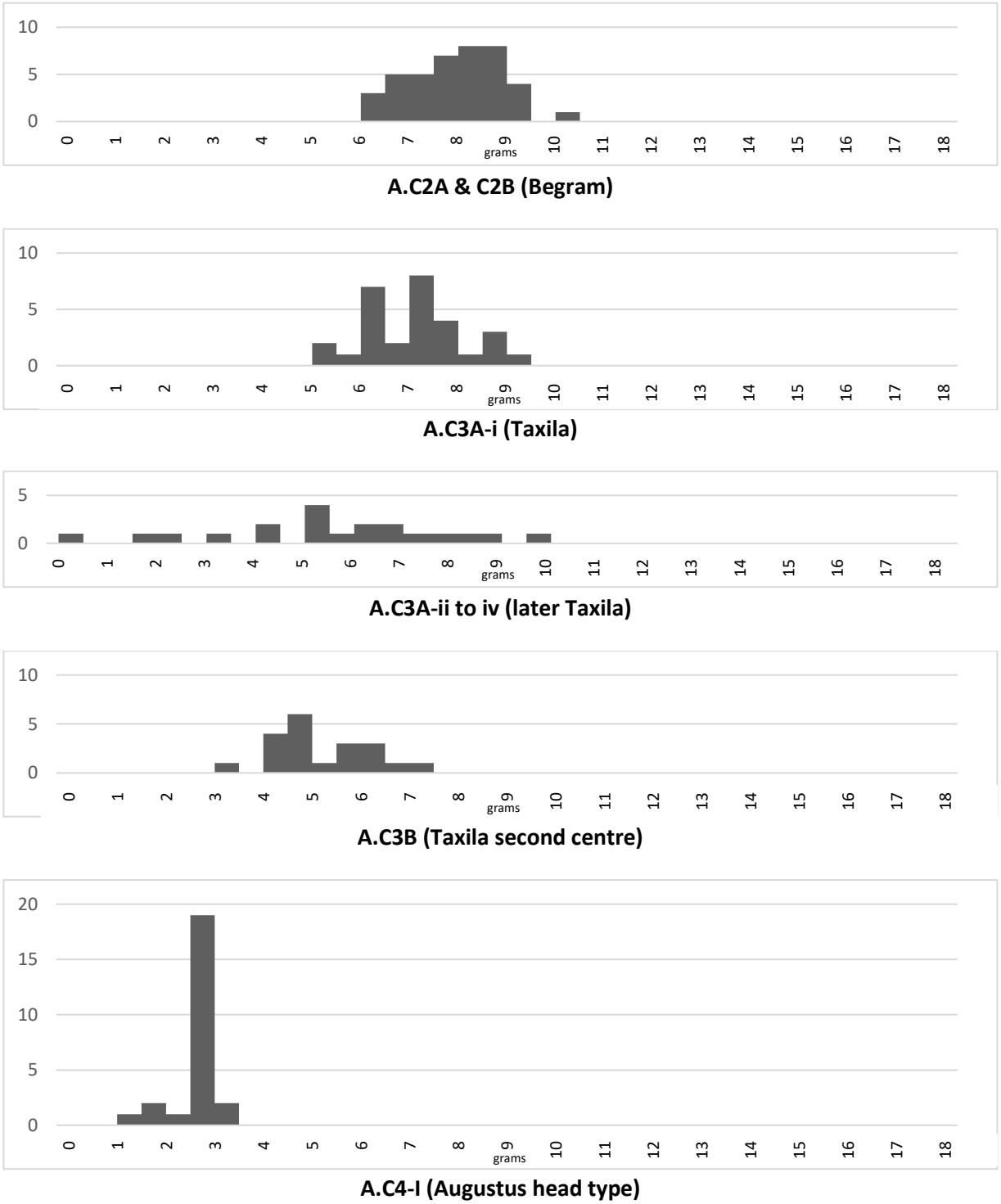


Figure 3.7 Weight chart
Weight distributions illustrating the falling weight standard under Kujula Kadphises for coinages at Begram (A.C2) and Taxila (A.C3) and the attempt to stabilise with the introduction of the 'Augustus head' type (A.C4) on a very precise standard. Histograms in this chapter use 0.5g baskets on a fixed scale for ease of comparison and are based solely on the data in the catalogue so are only intended as illustrative of the metrology discussions in the text

inscription naming the issuing king in Greek ΚΟΖΟΥΛΟ ΚΑΔΦΙΖΟΥ ΚΟΡΣΝΑΟΥ (Kujula Kadphises, Kushan), or more rarely in Bactrian ΚΟΖΟΥΛΟ ΚΑΔΦΙΣΕΙ ΚΟΡΣΑΝΕΙ (Kujula Kadphises, Kushan). The reverses of these coins, following the practice of early Indo-Greek, Indo-Scythian and Indo-Parthian coins, gave the ruler's name and titles in Gandhari Prakrit written using Kharoshthi script *kujula kasasa kushaṇa yavugasa dhamathidasa* (of Kujula Kasa, Kushan yabgu, firm in the law). In one case this inscription was Sanskritised: [*svamisa*] *kujūla kassasya kushaṇa yavuǵasya dharmathida*[*sya*] (of [Lord] Kujula Kasa, Kushan yabgu, firm in the law). The relationship between the two versions of this coinage is not clear. They both begin as full-weight Indian standard tetradrachms (*c.* 9.7g) and go through a gradual reduction in that weight standard. Logic suggests that the coins retaining the name of Hermaeus preceded those with Kujula Kadphises' own name on the obverse; however, this cannot be demonstrated. It is equally possible that they are the issues of two separate production centres in Begram. If they are sequential, rather than

Figure 3.8 Unofficial copies of Kujula Kadphises' copper coinage at Begram and Taxila (A.C2/3-imit)
Crude unofficial copper imitation coinages were made imitating the designs of Kujula Kadphises's Begram and Taxila issues. They normally have blundered or missing inscriptions on both sides and are very underweight.
a) unofficial imitation of Begram issue, collected in Begram (A.C2/3-imit: 156 1838,EIC.70, 1.53g, 15mm)
b) unofficial imitation of Taxila issue, collected in Pakistan (A.C2/3-imit: 146 1894,0506.1687, 3.07g, 18mm)
c) unofficial imitation of Taxila issue, collected in Chitral (A.C2/3-imit: 159 1933,0705.12, 0.89g, 12mm)

contemporary, then the second version could have been an attempt to reinstate the falling weight standard after that of the first version had begun to collapse.

This coinage also spread to Taxila with the Kushan occupation of that city and its region. Both inscription versions have been recorded from there (Khan and Cribb 2012), together with a third version (A.C3A-iii) which in its initial stage gives Kujula Kadphises on the reverse the royal title *maharaja* while retaining his Kushan yabgu title, but abbreviated his name to *kujula*, and then replaced the king's name with an altered, perhaps blundered, form *kalana karisa*.

An analysis of the distribution of the imitation Hermaeus coins allows a distinction to be made between production at Begram and Taxila based on finds from these sites (Khan and Cribb 2012; Cribb 2021). At both sites the coinage underwent a progressive reduction in weight standard, partly prompted by the unofficial copying of these coins. The full-standard well-written coins both seem to originate in Begram (A.C2A and A.C2B), but there was clearly movement of coins between these cities. The main production at Taxila appears initially to be copies of A.C2A coins with misspelt or reversed Greek inscriptions (A.C3A-i and -ii). These were followed by two series with altered designs: the *maharaja* group mentioned above (A.C3-iii) and coins with completely blundered obverse inscriptions (A.C3A-iv). A separate series (A.C3B-i) based on the Begram coins with Kujula Kadphises' name on the obverse was also made at Taxila, perhaps at a separate production centre in the city, or in a city nearby, as the style of portrait is very different. This series is also distinguished by the appearance on many of its coins of a Kharoshthi control mark.

The site finds from both Begram and Taxila are dominated by unofficial copies of the Hermaeus imitation series. There is, however, a distinction between the finds from these two sites, as at Taxila the copies rarely dropped below about 3.5g, whereas at Begram they fell as low as 0.5g. The official issues at Taxila also followed a descending rate similar to the falling weight of unofficial copies. The examples of Taxila issues (A.C3A-iii) dropped to about 5.5g and (A.C3B-i) about 3.5g (there are some lighter examples, but these are probably unofficial copies from Begram, indistinguishable on the basis of their treatment of the design). The circulation of unofficial copies and the reducing standard of the official coins appear to reflect the continuing pressure on the currency system which had resulted in the debasement of silver denominations and the reduction in weight of copper denominations. What caused this pressure on the monetary system remains unclear. As the Hermaeus imitation types of Kujula Kadphises were based on a denomination which was originally silver, but were issued without silver content, this pressure continued through the diminution of the unit value of the currency by reduction in weight as there was no silver left to be removed (a similar phenomenon affected the antoninianus coinage of the Roman empire in the late 3rd century AD, Butcher 2015). The dropping standard also appears to have led to the export back to Begram of the underweight coins issued at Taxila.

A rare issue (A.C5-i), known from finds in Hazara District and Begram, also reflects this lowering of the original standard, as surviving examples weigh *c.* 5.0–3.5g. The location of the mint is not known and the spellings of the royal name in what appears to be Bactrian, ΚΟΖΟΥΛΟΥ ΚΑΔΟΒΙΚΕΙ ΚΟΡΣΑ[Ν] (Kujula Kadphises, Kushan), and in Gandhari/Kharoshthi *kuṣaṇa yavu'asa kuyula ka'usa* (Kushan yabgu, Kujula Kadphises), do not correspond with those used at the other mints.

At both Taxila and Begram a remedy was sought to control the falling weight and value of the standard currency unit. Once the weight of coins had fallen to *c.* 3.5g, the Kushan authorities at Taxila appear to have attempted to stop the decline by replacing the Hermaeus imitation coins with a new issue weighing *c.* 3.5g (A.C4-i) and using designs derived from Roman coinage. The new coinage, copying its design from silver coins of the Roman emperor Augustus (e.g. Sutherland 1984, 60, RIC1 270) seems to have failed to

Figure 3.9 Copper coinage at Taxila (A.C4)
Copper coins were issued late in the reign of Kujula Kadphises at Taxila, matching the falling standard of his Heracles type coinage, perhaps as an attempt to replace them. Phases of production featured changing designs, the first phase (d), struck to a standard of *c.* 3.5g (A.C4-i), copied the design of coins of the Roman emperor Augustus (a–b), and the second phase (e), struck to a standard of *c.* 1.75g, copied an Indo-Scythian design of Azes II (c).
a) silver denarius of Augustus, struck at Lugdunum, *c.* 8 BC, showing wreathed bust and emperor on curule chair greeting a man holding a child (R.6136, 3.67g, 17mm)
b) copper coin of Azes II, *c.* 10 BC–AD 30, struck at Taxila, showing king seated cross-legged on cushion and the Greek god Hermes (IOC.185, 11.18g, 25mm)
c) unit issued late in the reign of Kujula Kadphises, showing wreathed Roman bust and king on curule chair (A.C4-i: 167 OR.9013, 3.35g, 18mm)
d) unit issued late in the reign of Kujula Kadphises, showing king seated cross-legged and the Greek god Zeus (A.C4-ii: 189 1922,0213.62, 1.69g, 15mm)

Figure 3.10 Copper coinage of Hazara or elsewhere (A.C5)
Copper coinage was struck under Kujula Kadphises, late in his reign, matching the reduced standard of the Begram and Taxila Heracles types, in a new mint, possibly in Hazara. The first examples were found in that region though examples are also known from Begram (Errington 2021a, 155–6). The coins feature a novel design of an armoured figure holding a spear and shield and a Bactrian inscription.
a) unit with helmeted bust and warrior holding spear and shield (A.C5-i: 202 1888,1208.530, 4.54g, 19mm)

stem the decline and it was itself replaced by a coinage, weighing *c.* 1.75g (A.C4-ii) and depicting a seated cross-legged figure of the Kushan king holding a pick-axe. On both these coins Kujula Kadphises continued to use the title Kushan yabgu, in Greek on the Roman-style issue: ΧΟΡΑΝΣΥ ΖΑΟΟΥ ΚΟΖΟΛΑ ΚΑΔΑΦΕΣ, but on the cross-legged king type illegibly, and in Gandhari: *khuṣaṇasa ya'u'asa kuyula kaphsasa sacadharmathitasa* (of Kushan yabgu, Kujula Kadphises, firm in the true law) on the Roman-style coins or more simply *kuṣaṇa yavugasa kuyula kadaphsasa* on the cross-legged type. The inability of the Taxila authorities to control the coinage was aggravated by the practice of cutting heavier coins in half so that they fitted into the reducing weight system (Gul Rahim Khan pers. comm., with publication in preparation). This practice continued down to the last cross-legged king issue. Coin finds from Swat (Göbl 1976; MacDowall and Callieri 2004) show that Kujula Kadphises' coinage for Taxila, including cut coins, also circulated into that region.

At Begram the circulation of reduced weight coins and unofficial copies continued until circulating coins had dropped below *c.* 2g, with some copies as light as *c.* 0.5g. The authorities in Begram adopted a different approach to stabilisation which proved to be more effective. The new issues (B.C1), often referred to as Soter Megas coins, were based on the restored Attic standard, issued in two denominations, a didrachm unit and hemidrachm quarter, both with the same design (Cribb 2014). The higher denomination, *c.* 8.5g, was close in weight to the original Hermaeus imitations, and the quarter *c.* 2.1g, to that of the existing light coins. The finds from Begram show that more 2.1g coins were current than 8.5g coins. The new coins no longer carried Kujula Kadphises' name, but gave him royal titles, based on those used by his Indo-Parthian neighbours: ΒΑΣΙΛΕΥΣ ΒΑΣΙΛΕΩΝ ΣΩΤΗΡ ΜΕΓΑΣ (king of kings, the saviour, the great), but misspelt and often abbreviated: ΒΑΣΙΛΕΥ[Σ] ΒΑΣΙΛΕΥΩΝ ΣΩΤΗ[Ρ ΜΕΓΑΣ]. This reform was successful and the coinage continued into the next reign. The technical details of how this coinage resolved the pressure on the coinage, like the reasons for the pressure itself, are unknown to us, but it clearly did resolve the currency problems as no significant reduction occurred in the coinage until the reign of Huvishka, nearly a century later (§E.2). These coins from Begram, known in modern scholarship as Soter Megas coins, circulated northwards into Bactria and westwards to Taxila and Swat. A more detailed account of this coinage and its continuation into the reign of Kujula Kadphises' son Wima Takto will be given below (§B.1–B.2).

A.4 Imitation coinage from Akra (Figs 3.11–12)

Alongside the official issues of Kujula Kadphises' administration a group of related coins were issued for circulation in Kushan territory. Finds from the ancient city site at Akra, Bannu, on the southern edge of Kushan rule, suggest that the coins may have been made there (Cribb 2002). This group consisted entirely of coins issued in the names of past kings. Three distinct series of these coins were issued:

1. copper imitation Hermaeus coins (A.C7A) with the same obverse design and inscription as Kujula Kadphises' Begram and Taxila issues, with reverse inscriptions retaining the name of Hermaeus or replacing it with that of the Indo-Scythian king Azes II;
2. base-silver drachms in the name of Azes II (A.S5);
3. leaded copper or lead coins (A.C7B) also in the name of Azes II.

All three series shared the same control marks and a common treatment of Kharoshthi letter forms, but are imitations of three distinct coinage series. The imitation Azes drachms and copper/lead series may predate the Hermaeus imitation series.

The imitations of the coins of the Indo-Greek king Hermaeus were based in part on Kujula Kadphises' Hermaeus imitations. Some retained Hermaeus' original Zeus reverse (A.C7A-i and -ii), but a second group featured a Nike, probably derived from Indo-Parthian coinage of Gondophares and his successors, in place of the regular Zeus reverse (A.C7A-iii). The imitations of Azes designs were based on his silver drachms (Senior 2001, type 105) or adapted from his copper coins (Senior 2001, type 102).

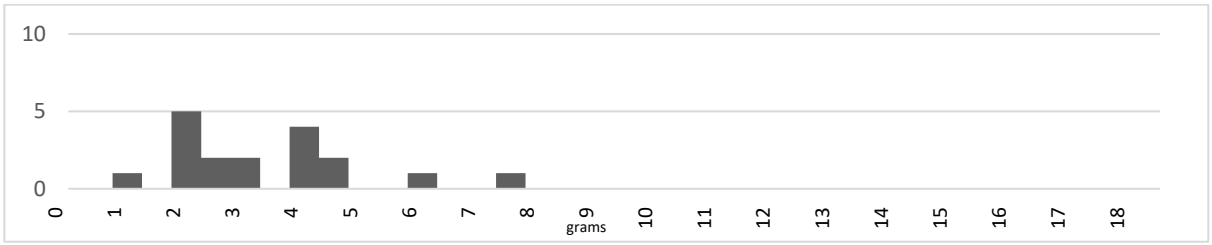
The copper imitation Hermaeus coins were issued on three different weight standards, two representing different stages in the reduction of the Indo-Greek standard as observed in Kujula Kadphises' coins. The heaviest series (A.C7A-i) is only represented by a so-far unique example, found at Akra (according to its ticket in the British Museum trays), which weighed *c.* 14g and retained the Zeus reverse of Hermaeus' coinage, but used the corrupt form of Greek inscription ΒΑΣΙΛΕΩΣ ΣΤΗΡΟΣΣΥ ΕΡΜΑΙΟΥ copied from Kujula Kadphises' coins. In the Gandhari/Kharoshthi inscription, *maharaja mahatasa heramayasa* (of king Hermaeus the great), this coinage also gave Hermaeus the title *mahata* (great) which was not used on his official coins. The denomination is a reduced Attic tetradrachm as used by Kujula Kadphises for his coinages in Bactria. A lighter series of Zeus type (A.C7A-ii), weighing *c.* 5–4g, used the same designs. This series mostly circulated in the Begram region where it seems to have been designed to circulate alongside the reduced weight copies of Kujula Kadphises' imitation Hermaeus coinage. The lightest issue (A.C7A-iii and -iv), weighing *c.* 2.5g, used a different reverse, showing winged Victory, based on the coinage design used by the Indo-Parthians. These Victory coins are not represented in Masson's coins collected at Begram, but are found in large numbers at Taxila, where Marshall recovered about 290 examples (1951, 767), but only 30 of the smaller Zeus type. The obverse was the same as the other two series, but the inscription was blundered. There were two different reverse Gandhari/Kharoshthi inscriptions, both different to that used on the heavier issues. One series (A.C7A-iii) retained the name of Hermaeus, but gave him different titles: *maharajasa rajarajasa mahatasa heramayasa* (of king, king of kings Hermaeus, the great), while the other series (A.C7A-iv) used the name and titles of the Indo-Scythian king Azes II, but structured and spelt in a way not used on Azes' own coins: *maharayasa mahatasa ayasa rayadirayasa* (of king Azes, the great, king of kings). These light issues seem to have been made only for circulation in Taxila.

The debased silver coins (A.S5) from this mint had a less restricted circulation than the Hermaeus imitation types as

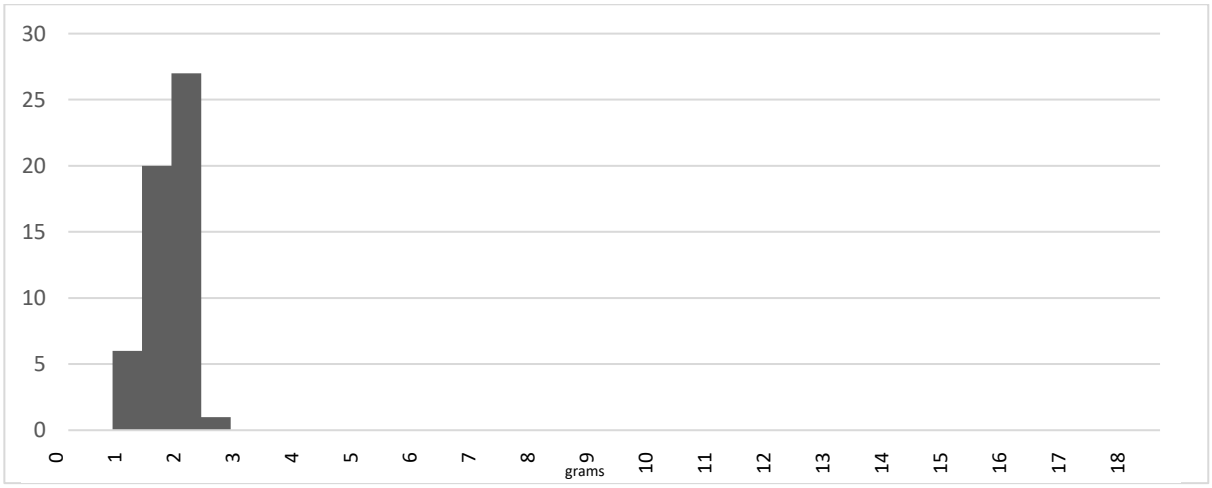
Figure 3.11 Kujula Kadphises period – base silver, copper and lead coins from Akra (A.C7A, A.S5, A.C7B)
Copper and billon (base silver) imitation coins were issued under Kujula Kadphises (d–g) by a mint probably at Akra in Bannu District. The relationship of the issuers of the coins to the Kushan state is unclear. They can be divided into three groups, the first (d–e) copied Indo-Scythian Hermaeus imitations (a) and Indo-Parthian Begram issues (b), the second (f) and third groups (g) copied Indo-Scythian coins of Azes II (c).
a) Copper tetradrachm Indo-Scythian imitation of silver tetradrachm of the Indo-Greek king Hermaeus, *c.* AD 20 (1847,1201.58, 9.04g, 24mm)
b) Copper tetradrachm of Indo-Parthian king Gondophares, *c.* AD 30–60 1922,0424.3713 (1888,1208.505, 8.58g, 24mm)
c) Silver drachm of Indo-Scythian king Azes II, *c.* AD 10–30 (1922,0424.358, 2.25g, 16mm)
d) Copper imitation coin in name of Hermaeus with Zeus reverse, Akra mint, *c.* AD 60–80, for circulation in Begram (A.C7A-ii: 257 1847,1201.48, 3.86g, 17mm)
e) Copper imitation coin in name of Hermaeus with winged Victory reverse, Akra mint, *c.* AD 60–80, for circulation in Taxila (A.C7A-iii: 277 1894,0506.1705, 2.30g; 14mm)
f) Base silver imitation drachm in name of Azes II, Akra mint, *c.* AD 60–90 (A.S5-i: 306 1922,0402.4532, 2.05g, 14mm)
g) Copper imitation coin in name of Azes II, Akra mint, *c.* AD 60–90 (A.C7B-i: 356 1894,0506,1913, 2.72g, 15mm)

A.C7A-ii

A.C7A-iii & iv



A.C7B-i



A.S5-i 1/4u

Figure 3.12 Weight chart
Weight distributions for coins produced at Akra showing a range of standards in both copper and silver

they have been found in Begram, Taxila, Swat, Gandhara and Akra. They followed the pattern of debasement found in other series of Azes imitations, using Azes' normal inscriptions and coin types, but apart from their linked control marks and Kharoshthi letter forms, they also have a distinctive feature, the pick-axe held by the king, which links them with the Soter Megas coinage issued at Begram and in Gandhara (see §B.1–B.2 below). They are also distinguished from other Azes imitation series by their drachm denomination, as the imitation series is largely of tetradrachms, but no coins of that denomination have been seen for this mint. The leaded copper coins (A.C7B) issued alongside these debased silver issues also present a novel design on their reverse: a seated Tyche. This goddess has her normal iconography of a cornucopia and polos headdress, but is shown seated on a curule chair, as depicted on the Roman-style Taxila coins of Kujula Kadphises. This denomination was issued in gradually reducing weight and copper content, dropping from *c.* 8g to less than 3g. Numerous examples were found at Taxila and perhaps they

were made for circulation there, but an unexpectedly large group was found at Akra (Cribb 2002), suggesting that they might have been made there.

There appears to be no coinage made under Kujula Kadphises for Gandhara, even though this region was positioned between two Kushan territories in Begram and Taxila. This is most easily explained if there was no Kushan control of Gandhara during his reign. This region seems to have stayed under Indo-Parthian rule until it was added to the Kushan state under the next king Wima Takto, who issued coins especially for it (see §B.2 below). The spillage of Taxila coins of Kujula Kadphises into Swat also suggests that there was no Kushan administration in that city, even though the kingdom of Odi, based in Swat, acknowledged the son of the Kushan king (Skinner 5; CKI 249; Baums 2012, 227–33, no. 24).

A.5 Kujula Kadphises: the pace and scale of production (Fig. 3.13)

The analysis and attribution of Kujula Kadphises' coinage above is based on the surviving specimens and their distribution among site finds from Uzbekistan and Tajikistan (Zeymal 1983; Staviskii 1986; Gorin 2015), Masson's Begram finds (Errington 2021a; Cribb 2021) and the excavated material from the sites at Taxila (Marshall 1951; Khan and Cribb 2012). The relative order of production is less clear and based on the relationships between issues from each currency zone. The Chinese account of Kujula Kadphises (*Hou Han Shu*: Hill 2009, 28–9; Yu Taishan 2014, 386–8) describes his destruction of the other four yabgus in Bactria/Tokharistan and his conquests south of the Hindu Kush. The names of the territories he conquered are open to various interpretations (Hill 2009, 351; Yu Taishan 2014, 389), but the locations at which his coins were issued give a clearer indication of his conquests.

It seems most likely that Kujula Kadphises' earliest issues were those made for his home territory in the Wakhsh river region (A.S2-i) and for Kashmir (A.C6-i). Their designs were influenced by coins from Gandhara (Indo-Parthian Gondophares issues, Senior 2001, type 216) and from Kashmir (Zeionises silver issues, Senior 2001, types 130–2), suggesting that these issues were contemporary with his campaigns into Kashmir (see §A.2.1 above). This is reinforced by the fact that his first issue in Kashmir (A.C6-i) had the same design as the Wakhsh-region tetradrachms. In Kashmir he immediately abandoned this for issues which conformed more with the local copper currencies of Zeionises (Senior 2001, type 133) and his predecessor Azes II (Senior 2001, type 102). Surviving examples of the Wakhsh coinage suggest a relatively large production, but probably limited in circulation to the zone where it was made, even though a few examples have been found elsewhere in Kujula Kadphises' territory, further west at Termez (Staviskii 1986, 135, 258–9), Tillya Tepe (Zeymal 1999), Dilberjin (Gorin in Falk 2015a, 77, fig. 4) and south at Tashkurgan, Khulm (Staviskii 1986, 135, 258–9), Jalalabad (Errington 2017a, 90) and Taxila (Marshall 1951, R.U.C. no. 174).

The *Hou Han Shu* places his destruction of the other yabgus before moving south of the Hindu Kush, so it seems likely that the so-far unique silver imitation Eucratides (A.S1-i) coinage bearing his name was issued as a consequence of defeating the other yabgus. The imitation Heliocles coins (A.C1-i and -ii) continued in circulation until replaced by the Soter Megas coinage in the reign of Kujula Kadphises' son, but the date of their start can only be estimated by the likely date of his defeat of the Dumi yabgu who controlled western Bactria/Tokharistan, where the coins are most frequently found (Staviskii 1986, 127–40, fig. 12; information supplemented by Gorin's maps in Falk 2015a, 75–6, figs 2–3). Pre-Kushan imitation Heliocles coins were struck in silver, but the series found in excavation levels immediately below the Soter Megas coinage were all made of copper, suggesting that Kujula Kadphises was aware of the debasement south of the Hindu Kush when he started this coinage, i.e. about the time of his southern conquests. Judging by the finds and their distribution it was a larger coinage than the Wakhsh coinage. The final phase of the coinage (B.C2-i) is marked with the same tamga as the early Soter Megas coins from Begram (B.C1-i), so is probably contemporary with them, in the period before the Begram issues penetrated into Bactria/Tokharistan.

Kujula Kadphises' coinage minted at Begram was immense: over 500 specimens were collected by Charles Masson in the 1830s at the site (Errington 2021a, figs 34–5). The finds from Begram consist of well-made official issues weighing *c.* 9g (Indian standard tetradrachms, a denomination inherited from the silver coinage of the Indo-Greeks) and lots of underweight unoffficial copies, weighing from *c.* 7g down to below 1g. The full-weight coins have two forms of inscriptions: a blundered version of the Indo-Greek king Hermaeus' inscription (A.C2A-i), or Kujula Kadphises' own name written in Greek (A.C2B-i) or Bactrian (A.C2B-ii). Most of the copies are based on the Hermaeus imitation version. The evidence for the order of the official coins is a matter of conjecture. It is proposed here that the coins in his own name were issued later as an attempt to restabilise the official monetary system as a response to the degeneration and the issue of underweight imitations. The collapse associated with the unofficial copies was probably a continuation of the progressive degeneration of all currencies in the region; in areas where silver coinage had existed it gradually had its silver content reduced, so that once the silver was gone, the reduction in weight of the replacement copper coinage was a continuation of the well-established trend in the descent in value of the standard currency units. The collapse only ended once the Kushan establishment was robust enough to carry out a complete replacement of the existing coins with a new coinage system based on the Soter Megas coinage (Cribb 2014; see §B.1 below).

The start of the Begram coinage can only be established by its association with the unknown date of Kujula Kadphises' conquest of the city. There are no connections between this coinage and his issues north of the Hindu Kush, but the connection with the debased copies of Hermaeus associated with the Indo-Scythians are clear (Cribb 2021). The reign of Hermaeus must have ended in the early 1st century BC and imitations began soon after and continued until Kujula Kadphises' conquest. In the Begram finds (Errington 2021a) and in stupa finds near Jalalabad

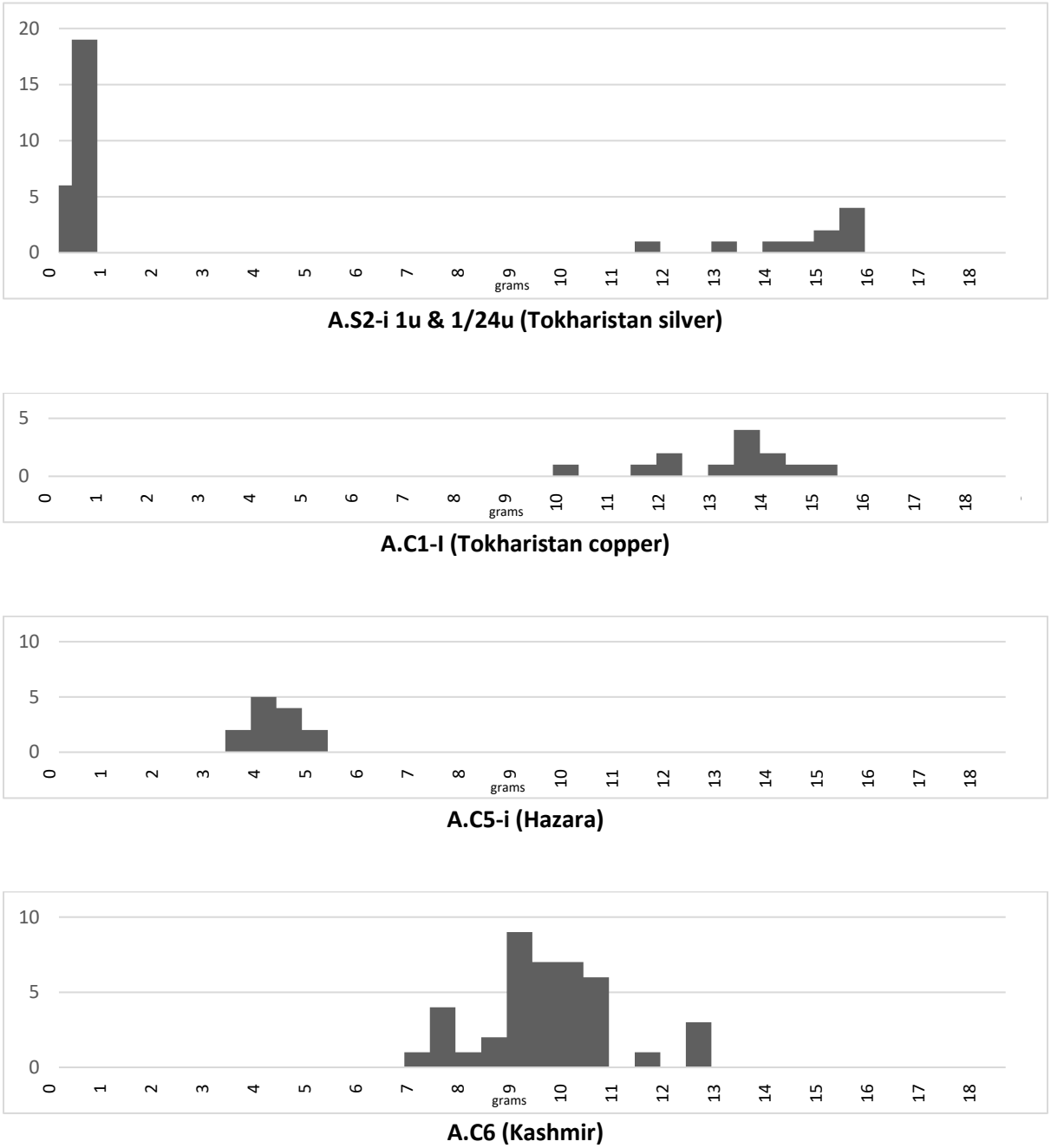


Figure 3.13 Weight chart
Weight distributions for coins issued in Tokharistan (S2 & C1), Hazara (C5), and Kashmir (C6) showing the variation in weight standards employed throughout the empire under Kujula Kadphises

(Errington 2012; 2018, 38; Rienjang 2016, 146–200) Kujula Kadphises' Begram coins were associated with copper tetradrachms of the Indo-Parthian king Gondophares (Senior 2001, type 213). These were probably issued in Begram or in the Ghazni region, with similar designs used on Indo-Parthian coins from the Kandahar region (Senior 2001, type 212). Gondophares' issues are either contemporary with Kujula Kadphises' issues as they were occasionally overstruck on the pre-Kushan Hermaeus imitations or more probably issued shortly before as they were in turn used as blanks for Kujula Kadphises' overstrikes (Mitchiner 1975–6, vol. 9, 735, no. 1086, A.C2B-ii, 1B/1a). The Begram imitation Hermaeus coinage ended when the Soter Megas coinage was introduced towards the end of Kujula Kadphises' reign (Cribb 2014, 102–4).

The imitation Hermaeus coinage current in Taxila after its conquest by Kujula Kadphises was in part imported from Begram, but was also supplemented by local issues, initially copying Begram coins (A.C3A-i and -ii), but then developing its own characteristics (A.C3A-iii and -iv, A.C3B-i). A total of 2016 coins of this series were recovered from the site by Marshall (1951, 792; Khan and Cribb 2012). The initial local issues at Taxila were based on the early issues of Begram (A.C2A-i) and these were followed by coins with local characteristics based on the Begram issues which replaced the name and title of Hermaeus on the obverse with those of Kujula Kadphises (A.C2B-i). This sequence could suggest that the Begram coins inscribed on the obverse with Kujula Kadphises' own name were issued later than those still naming Hermaeus. As at Begram the coinage was plagued

with unofficial copies, so that the Kushan authorities in Taxila sought ways to stop the degeneration of the monetary system. The first steps were the local official imitation Hermaeus coins (A.C3A-iv, A.C3B-i) which were struck to correspond with the lower weight, *c.* 6g, of the coins in circulation. This did not work, so eventually a new coin design, based on a Roman prototype, was introduced at *c.* 3.5g (A.C4-i), with 334 found in the excavations (Marshall 1951, 792). When this also failed to stem the tide of degeneration, an issue weighing *c.* 1.75g was also tried (A. C4-ii), with 78 examples found in the excavations (Marshall 1951, 792). These two attempts at reform came close to the end of Kujula Kadphises' rule in Taxila, and were probably fairly short-lived, as they only represent about 16% of his coinage found in the Taxila excavation, even though they were the latest issues.

Kujula Kadphises' coinage first reported from Hazara (A.C5-i; two Hazara finds reported by Smith 1898, 133–4) can be positioned in relation to the rest of his coinage by its weight standard, *c.* 6–5g, as it represents the reduced version of the Indian standard tetradrachm after it had been impacted by the degeneration of the Begram and Taxila coinages. So it was probably issued after the initiation of coinages in Begram and Taxila, but before the issue of either the Begram Soter Megas coinage or the Taxila Roman type. Its attribution to Hazara is entirely conjectural, as four examples have also been reported from Begram (Errington 2021a, 53–4; Ghirshman 1946, 97, pl. XXII, no. 8).

The Kashmir coinage of Kujula Kadphises started with an issue (A.C6-i), based on his issue for the Wakhsh region (A.S2-i), which appears to have been very brief, as it is only known from two coins from the same dies and from the undertype of an overstrike in the next phase of the Kashmir mint (A.C6-ii 1u: coin no. A). The rest of the coinage (A.C6-ii) goes through many minor changes of design. It is not clear whether this is because the coinage is long lasting, or the control system is very meticulous. The evidence of designs and inscriptions, unfortunately, do not give a clear indication of the beginning point of the production of this coinage. The design of the first phase could indicate that the coinage began early in the reign, but without any certainty. The use of the full royal title *maharaya* or *maharaja* by Kujula Kadphises on all these coins, however, points to a later stage in the reign, as it is not used on the rest of his coinage apart from a brief issue at Taxila (A.C3A-iii) and the silver coins from Sind (A.S3). In inscriptions Kujula Kadphises is given the royal title from year 122 of the Azes era (Panjtar inscription, *c.* AD 76; Skinner 2; CKI 59). The coinage continues until the end of the reign as very similar coins were issued by Wima Takto (B.C5-i).

The silver coinage issued in Sind (A.S3) is very rare and only known from a handful of coins. The use of silver for this issue is unusual at this period, but these coins fit into a series of Indo-Parthian coins struck as drachms on the Indian weight standard. This peripheral region of both Kushan and Indo-Parthian rule was influenced in its choice of silver by the extensive coinage of their southern neighbour, Nahapana, king of Broach (*c.* AD 40–78). Nahapana's choice of silver for coinage apparently resulted from the import of Roman silver (Turner and Cribb 1996, 312–13). The recently discovered silver drachm with Tyche reverse (A.S4) could be a product of the same mint, or of a different mint in the same region, as it is closely connected by its obverse portrait type showing the king wearing a tall hat and with long sideburns. If from the same mint, then perhaps it comes before the Nike type (A.S3), as its Greek inscription is not blundered.

Alongside Kujula Kadphises' coins a series of posthumous issues in the names of the Indo-Greek king Hermaeus and the Indo-Scythian king Azes II circulated in the territories under Kushan control and probably also into Indo-Parthian territory in Gandhara. The coins all had novel versions of the Hermaeus and Azes II designs they used. The Hermaeus imitations came in three different denominations which do not appear to be connected to each other, but match the denominations of Kujula Kadphises' coins. A so-far unique coin (A.C7A-i), found at Akra, Bannu district in Pakistan, matched the reduced Attic tetradrachm standard of the Kushan copies of the Bactrian Greek king Heliocles I. The second issue (A.C7-ii) weighed *c.* 5–4g and seems to have been intended to reflect the reduced weight of Kujula Kadphises' Begram copper issues on the Indian tetradrachm standard. The only find spot known for these coins is Begram, which suggests that they were made for circulation there. Curiously, examples of this issue have been found overstruck by Khotanese coins (Cribb 1984b, 147). The third and fourth issues (A.C7-iii and -iv, in the names of Hermaeus and Azes respectively) seem to have the same purpose to fit into Kujula Kadphises' reduced weight coins, but at Taxila, where 263 examples were found in Marshall's excavations (1951, 768), they correspond with a later stage, *c.* 2.5g, of the descent in weight. In spite of the different locations in which they circulated, the control marks and shared style of the Kharoshthi inscriptions make it clear that they were all made in the same place, probably Akra because that was where the unique coin of the first phase was found.

The same control marks and form of Kharoshthi link these coins with a group of coins which otherwise appear to be issues of Azes II. The designs are not identical to known Azes II coins, but are very similar. The base-silver coins (A.S4) have been found at both Taxila and Begram, and the associated copper/lead coins (A.C7B-i) at Akra (8 examples, Cribb 2002) and Taxila (87 examples, Marshall 1951, 783). The base-silver coins were copied from Azes II's king mounted holding whip/Zeus holding Nike type (Senior 2001, type 105), but the king was shown holding a pick-axe, and Zeus wearing a helmet. This links them closely with the design of the Soter Megas coins, which also show a king holding a pick-axe. The copper/lead coins had a novel design, not used by Azes II.

The distribution of these imitation coins shows that they were made for circulation in the territories controlled by Kujula Kadphises. Perhaps the ruler of Akra was a client or ally of the Kushan emperor and took the opportunity to make money out of supplying coins to the Kushan state. The links into the degenerating Kushan monetary system and to the Soter Megas coinage position them well after the arrival of the establishment of Kushan rule and suggest that they were being made until late in Kujula Kadphises' reign (see also Ch. 2 §A.1).

Figure 3.14 Anonymous Soter Megas copper coinage of Kujula Kadphises to Wima Takto, Begram mint (B.C1)
Copper coins of the anonymous Soter Megas type were minted at Begram (B.C1) from the end of the reign of Kujula Kadphises through the reign of Wima Takto. Although initially a local issue, these coins circulated throughout the empire. They were issued in three phases in both full units (Attic didradrachm) of *c.* 8.5g and quarter units. The coinage is very consistent, phases being distinguished only by the shift from four to three prongs on the tamga, subtle changes in the treatment of the images, the letter forms and the completeness of the inscription.
a–b) unit and quarter of the first phase issued in late reign of Kujula Kadphises with square letter forms and four-pronged tamgas (B.C1-i: 361 1894,0506.771, 8.34g, 20mm; 386 1894,0506.774, 2.18g, 14mm)
c–d) second phase unit and quarter issued in reign of Wima Takto with abbreviated inscription, cursive letter forms and three-pronged tamgas (B. C1-ii: 411 IOC.242, 8.07g, 19mm; 415 1894,0506.780, 1.82g, 14mm)
e–f) third phase unit and quarter issued in reign of Wima Takto with cursive letter forms and three-pronged tamgas (B.C1-iii: 476 1838.EIC.76, 8.35g, 23mm; 484 1847,1201.122, 2.07g, 12mm)

B.1 Soter Megas coinage, from Kujula Kadphises to Wima Takto, second Kushan ruler, c. AD 90–113 (Fig. 3.14)

The Soter Megas coinage probably commenced under Kujula Kadphises at the Begram mint (B.C1) and its production continued throughout the reign of his son Wima Takto (Cribb 2014). Unlike the earlier Begram issues the new Soter Megas coinage appears to have circulated throughout the empire. The designs of these coins were adapted, like Kujula Kadphises' silver 'Heraus' issue, from Bactrian Greek prototypes, but the royal portrait on the obverse was replaced by a bust of a sun god holding an arrow, and, as on the 'Heraus' coins, an equestrian portrait of the king was used on the reverse. The treatment of the royal image is based on the coinage of the Indo-Scythian and Indo-Parthian kings and shows him wearing Iranian riding dress and holding a pick-axe weapon in his raised right hand. This coinage was initially issued in two denominations: unit and quarter. Judging from surviving examples the quarters are very common in the early phase of production, but their production ceases during phase three (see **Table 3.2**). The progression of the coinage can be observed through changes in the treatment of the inscription, particularly the distinctive use of both squared and rounded (cursive) Greek letter forms and its abbreviation and misspelling (see **Table 3.1**). The square to cursive sigma, epsilon and omega letter forms in the inscriptions reflect a general trend in the writing of Greek taking place in the 1st century AD which began to appear on coins in the region during the reign of Gondophares. There were also two forms of the Kushan tamga used on the coins, distinguished by having four or three upright prongs at the top. The use of the four-prong version was replaced by the three-prong version soon after the coinage began (B.C1-i and -ii), which could be an indicator of the change of king from Kujula Kadphises to Wima Takto. The coinage continued (B.C1-iii) until it was

Phase	Den.	No. of tamga prongs obv./rev.	Obverse artists				Reverse inscriptions (form of letters B, Σ, E and Ω) / horse ears				Σ at end of ΒΑΣΙΛΕΥΣ
B.C1-i			artist 1	artist 2	artist 3	artist 4	square complete/ 1 ear	square abbrev/ 1 ear	square B=8 complete/ 1 ear	square B=8 abbrev/ 1 ear	
	U	4/4	1A	2A	3A		1a, 1b, 1c, 1d	1b, 1d, 1e	1c		Σ
	U	4/3		2A	3A			2b	2c	2d	Σ
	U	3/3	1B	2B	3B	3C	2a, 2e	2b, 2f, 2g	2c	2d	Σ
	¼	4/4	1A	2A	3A			1a–1g			Σ
	¼	4/3	1A	2A				2a, 2b, 2e			Σ
	¼	3/3	1B	2B,	3A			2a, 2b, 2d–2h		2c	Σ
B.C1-ii			artist 1	artist 2	artist 3	artist 4	cursive/ 1 ear	cursive abbrev/ 1 ear	mixed/ 1 ear	mixed/2 ears	
	U	4/4	1A	2A			1a	1b			Σ / no Σ
	U	3/3		2B	3A	4A	2a	2b, 2c	3a, 3b, 4a	5a	Σ / no Σ
	¼	3/3	1A	2A				1a	2a, 2b, 2c		Σ / no Σ
B.C1-iii			artist 1	artist 1 copyist			mixed/ 2 ears	cursive/ 2 ears	blundered/ 2 ears		
	U	3/3	1A	1B			1a	1b			no Σ
	¼	3/3	1A				1a		1b		no Σ

Den. = denomination; obv./rev. = obverse/reverse; U = unit; ¼ = quarter unit

Table 3.1 Phases in the Begram mint Soter Megas coinage

Phase	Unit	Quarter
B.C1-i	52	416
B.C1-ii	12	74
B.C1-iii variety 1A/1a	60	55
B.C1-iii variety 1B/1a	35	
B.C1-iii variety 1B/1b	154	

Table 3.2 Begram finds of classifiable Soter Megas coins of the Begram mint

replaced by a new series of coins issued by the Kushan administration under Wima Takto's son Wima Kadphises (§C.2). This Begram coinage spread widely throughout Kushan territory with examples found from Uzbekistan and Tajikistan to India.

Charles Masson collected a very large number of Soter Megas coins at Begram, mostly of the types attributed here to the Begram mint. He reported finding 695 examples, and in the India Office Library Collection and the British Museum collections there are 347 units and 559 quarters of the Begram mint coins from Masson's collection (Errington 2021a, 154). All the phases are represented. All phases were also found at Taxila, but in much smaller numbers and fewer quarters (39) than units (80) (Khan 2014, 144–5). Soter Megas coins of the Begram issue are also reported from finds in Afghanistan, Uzbekistan and Tajikistan, but again fewer quarters than units (Zeymal 1983, 171–7; Masson 1950; Rtveladze and Pidaev 1981). There are no varieties at any of the sites where these coins are found which are not represented among the Begram finds. This suggests that Begram was the centre from which these coins were circulated and that the larger coins were exported from Begram in larger proportions than the quarters.

The coins collected by Masson from Begram show a changing pattern of production and usage. The first phase coins are mostly quarters, but the phase three coins are mostly units and the latest quarters only match the earliest variety of phase three. This distribution shows that when the coinage began the quarters were the main part of the coinage, but well before the end of the coinage they were no longer being issued (**Table 3.2**). This suggests that the pattern of demand for the different denominations changed over time. It seems likely that when the coinage was started it was intended to replace Kujula Kadphises' failing Hermaeus imitation coinage. The quarters would have replaced the low-weight copies of the Hermaeus imitation coins at par, enabling the withdrawal of the failing coins, then, once the new system was established, the units re-established a coinage which was close to the original Hermaeus imitation weight standard. This then laid the basis for the further reforms under Wima Kadphises (see §C.1 below) by establishing the Attic standard as the official weight standard for copper coinage and by eliminating debased, underweight and imitation coins from the monetary system.

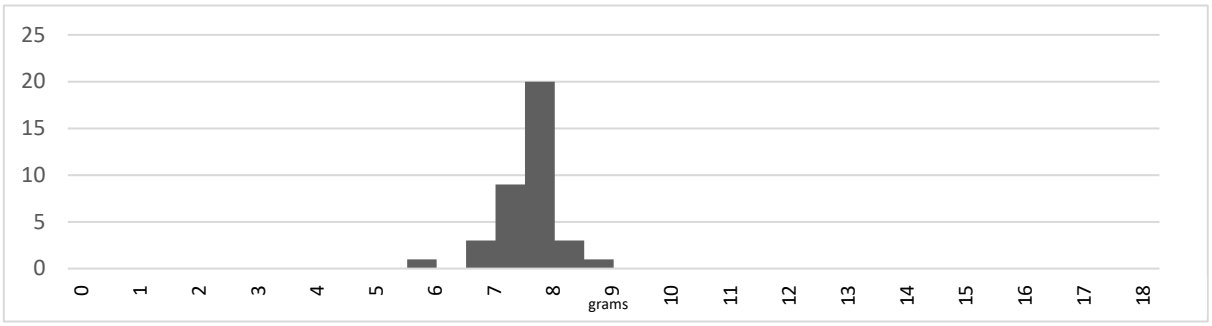
More coins of the Soter Megas series were found by Masson than any other ancient coin type, suggesting that it was a very large coinage. There is little evidence from hoards that the Soter Megas coinage continued in use after the reforms of Wima Kadphises had been established, so the high number of finds cannot be explained by longevity of circulation. Unfortunately there is no evidence of the precise process of collecting at Begram, so it cannot be ruled out that the high number of coins was affected by the inclusion of hoards from the site.

Figure 3.15 Anonymous coinage of Kujula Kadphises and Wima Takto, Western Tokharistan (B.C2)
Copper coins were issued in Western Tokharistan on a local reduced Attic standard. The first issue of both tetradrachms and drachms (a–b) replaced the image of Zeus on earlier Kujula Kadphises coins with a horse. During Wima Takto's reign, after a reduction in the weight standard to *c.* 12g, a new design (c) similar to the Soter Megas types of Begram was introduced at this mint. A single drachm with these design has been seen by the authors (no image shown).
a–b) tetradrachm and drachm issued late in the reign of Kujula Kadphises and into the reign of Wima Takto. When not worn a four-pronged tamga like that used on Soter Megas coinage (B.C1) is visible on the rump of the horse (B.C2-i: 495 OR.286, 12.1g, 27mm; b) 498 1857,0813.65, 3.69g, 17mm)
c) tetradrachm of Wima Takto, with Soter Megas designs, on some examples the first one or two letters of the king's name are visible (B.C2-ii: 506 1894,0506.763, 11.10g, 24mm)

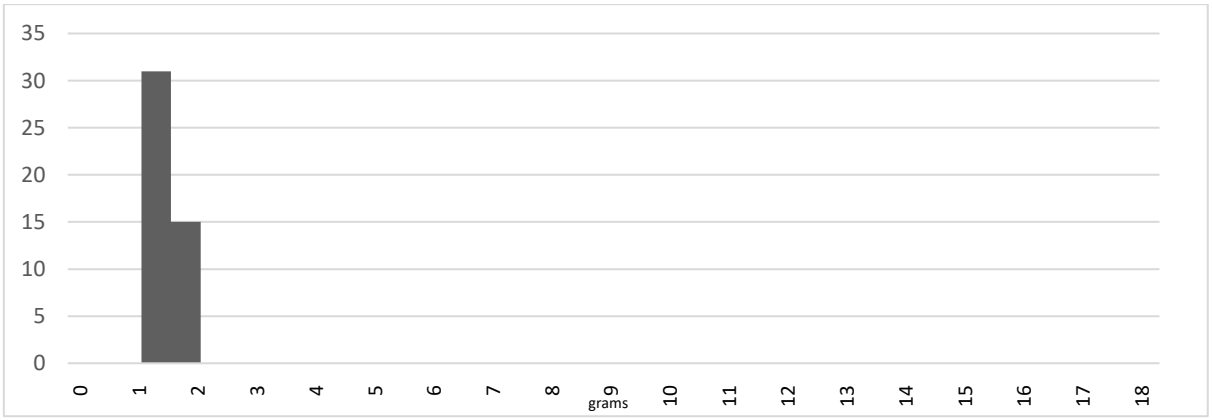
B.2 Local Soter Megas coinage (Figs 3.15–3.18)

Late in the reign of Kujula Kadphises a new issue was made for circulation in the parts of Bactria where the copper imitation Heliocles coins (A.C1) issued for the western Bactria/Tokharistan region were current. The new issue of tetradrachms and drachms (B.C2) replaced the standing figure of Zeus on the reverse with a horse, which was stamped on its rump with the four-pronged Kushan tamga of the early Soter Megas coinage. North of the Hindu Kush these coins have been reported from the same region as the earlier Heliocles imitations, but they were also found in significant numbers at Begram; a total of 48 drachms from the Masson collections can be traced in the British Museum and India Office Library collections (Errington 2021a, 159). Only one example has been found further east, from Taxila (Marshall 1951, 801). These coins seem to have travelled south from Bactria/Tokharistan late in Kujula Kadphises' reign. Unlike the earlier issue of imitation Heliocles coins with Zeus, this issue was mainly represented by drachms rather than tetradrachms.

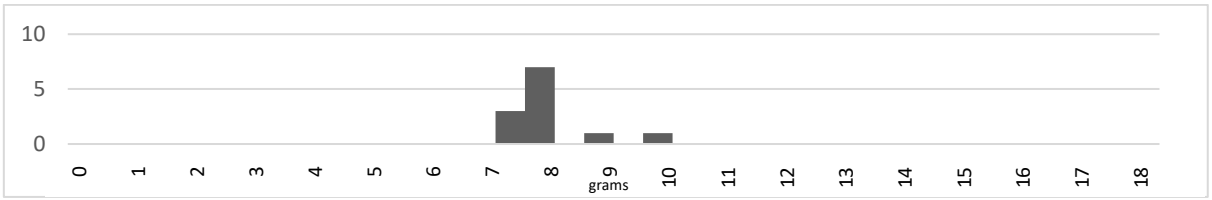
Under Wima Takto the Begram Soter Megas issues were accompanied by local issues with the same titles, replacing earlier issues in Bactria/Tokharistan and supplying new coinage to the recently conquered territories of Gandhara and Mathura. When Taxila came back under Kushan rule Begram coins were imported to that region (Khan 2014), as they had been in the earlier part of the reign of Kujula Kadphises. In the newly captured territories of Gandhara and Mathura new types were issued. All the new local issues used the Begram issues' three-prong tamga and late versions of the round (cursive) Greek letter forms in the inscription ΒΑΣΙΛΕΥ ΒΑΣΙΛΕΥΩΝ ΣΩΤΗΡ Μ[ΕΓΑΣ], as in the third phase of the Begram coinage (B.C1-iii), so all the local issues can be attributed to late in the reign of Wima Takto.



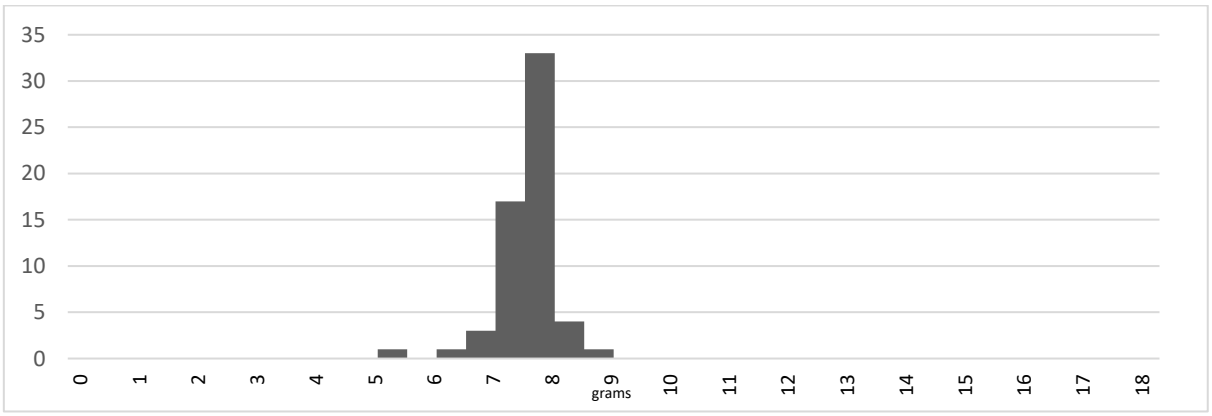
B.C1-i 1u (first phase tetradrachms)



B.C1-i 1/4u (first phase drachms)



B.C1-ii 1u (second phase)



B.C1-iii 1u (third phase)

Figure 3.16 Weight chart
Histograms of catalogue data for Begram Soter Megas issues (B.C1) showing a strong control over weight persisting through all phases

Figure 3.17 Anonymous coinage of Wima Takto, Gandhara (B.S1 and B.C3)
Base silver and copper coins were issued during Wima Takto's reign in the newly acquired territory of Gandhara (B.S1 & B.C3). The base silver issues were based on the coinage of the Indo-Parthian king Sasan (a) and were issued as tetradrachms (b) of *c.* 9g and drachms (c). A very small copper unit (d) of *c.* 1.5g with the same control marks as the base-silver coins was also issued.
a) base silver Indian standard tetradrachm of Indo-Parthian king, Sasan (*c.* 60–90), prototype for Gandharan types (1859,0301.97, 10.01g, 21mm)
b–c) base silver tetradrachm and drachm of Wima Takto, two examples of the tetradrachm are known with the first part of Wima Takto's name at the end of the Kharoshthi inscription (B.S1-i: 517 OR.7458, 9.77g, 21mm; c) 525 1894 0506 805, 1.72g, 12mm)
d) copper coin of Wima Takto depicting Oesho and Ardochsho (B.C3-i: 529 1894,0506.831, 1.66g, 13mm)

The first of these local issues was for Bactria/Tokharistan, where imitation Heliocles coins circulated (A.C1 and B.C2-i). The new coinage (B.C2-ii) had the same reverse as the Begram coins (B.C1), but a helmeted bust, still holding an arrow, facing left and surrounded by a reel and pellet border on the obverse (derived via the Wakhsh coins of Kujula Kadphises (A.S2-i) from Bactrian Greek coins). The coins weighed about 13g, tetradrachms matching the reduced Attic standard of the Heliocles imitation coins. A so-far unique drachm, weighing 3.09g, has also been reported. The first issue of these coins was marked to indicate their issue by Wima Takto by the addition at the end of the Greek inscription on the reverse (B.C2-ii, reverses 1a, 1b and 1c) of the first two letters of his name OO and his initial *vi*, in Kharoshthi, before the god's face. The second issue (B.C2-ii, reverse 2a) retained the Kharoshthi initial, but omitted the Greek letters. The similarity of these issues to those of Begram suggests that they may have been made at the Begram mint for export to north of the Hindu Kush. These coins are relatively scarce and no find spots have been documented, apart from two examples collected by Masson from Begram (Masson 1834, 169, pl. X, fig. 29; 1836, 11, no. 99), so the attribution to Bactria/Tokharistan is conjectural.

The second local issue (B.S1 and B.C3) was for the newly conquered territory of Gandhara. Here coins were issued with designs adapted from the local Indo-Parthian issues in the name of Sasan. This coinage was in two base-silver denominations (B.S1): an Indian standard tetradrachm, *c.* 9.5g, and a drachm, *c.* 2.3g, and an associated copper denomination (B.C3) weighing just *c.* 1.6g. The obverses of the

Figure 3.18 Anonymous coinage of Wima Takto, Mathura (B.C4)
Copper coins were issued during Wima Takto's reign in the newly acquired territory of Mathura (a). They are anonymous like many other issues with the Soter Megas title, but the Attic weight standard drachm denomination (*c.* 4g) and design, a standing figure of Zeus on the reverse are based on Kujula Kadphises' issues from Bactria (A.C1-i).
a) drachm of Wima Takto (B.C4-i: 558 1894,0506.811, 3.72g, 18mm)

Figure 3.19 Bronze coinage of Wima Takto, Kashmir (B.C5)
Copper coins were issued in the name of Wima Takto in Kashmir, initially as both units, *c.* 10g (a), and quarter units (b), but subsequently only as units at a reduced weight standard of *c.* 4g (c–e). The coinage retained the bull and camel design used in Kujula Kadphises' reign. Other than the reduction in weight from the first to second phase (c), subsequent phases are distinguished by changes in the flan size (d), inscription and control marks (e). The coins were not anonymous, featuring Wima Takto's name, though in practice the inscription is frequently truncated or off-flan. The last phase was issued in the name of a local sub-ruler, a grandson of the king.
a–b) copper unit and quarter in the name of Wima Takto (B.C5-i: 568 1987,0108.7, 9.56g, 21mm; 570 1894,0506.1857, 1.98g, 15mm)
c) reduced weight unit of second phase with small flan (B.C5-ii: 573 1998,0309.5, 4.02g, 17mm)
d) reduced weight unit of third phase, with larger flan (B.C5-iii: 598 1894,0506.1848, 3.18g, 19mm)
e) reduced weight unit of fourth phase, in the name of the king's grandson (B.C5-iv: 601 2001,1005.17, 4.02g, 14mm)

base-silver coins were based on the reverses of the Begram Soter Megas coinage, but on some dies the pick-axe was replaced by an open-handed gesture, as on the Indo-Parthian prototype. The inscription was often abbreviated. The reverses retained the standing Greek god type of Sasan's coinage, but with new control marks including the Kharoshthi initial *vi* of the king's name and a *purnagata* (vase of plenty). The Kharoshthi inscription was a Gandhari translation of the king's titles: *maharajasa rajatirajasa mahatasa tratarasa* (of the king, king of kings, the great, the saviour). On two examples the inscription is extended by the initial part of the king's name *vema* … (Cribb 2014, 102–3). Two overstrikes are known in this series with the king's name: one on the prototype coinage of Sasan and the other on a coin of Mujatria, satrap of Nagarahara (Jalalabad region) (Cribb 2014; 2015). A copper coinage on a standard of *c.* 1.6g accompanies the base-silver coins. This issue has no inscription apart from the king's Kharoshthi initial *vi*, but shares the three-pronged tamga and *purnagata* symbol with the base-silver coins. The designs feature a goddess (Tyche/Ardochsho) and a naked male god holding a staff (Oesho?). This coinage is relatively scarce and was probably very short-lived. The attribution to Gandhara is based on the prototype. The only find-spot evidence for these coins is the collection from Begram by Masson of 5 units, 1 quarter and 4 coppers (Errington 2021a, 161) and of 4 coppers from Taxila (Khan 2014).

The third local coinage (B.C4) was issued for Wima Takto's most distant conquest, the region around Mathura in India. The coins have only one denomination: a reduced Attic standard drachm, *c.* 4g, i.e. half the weight of the Begram unit and re-using the designs of the Termez region imitation Heliocles coins with Zeus reverse of the previous reign. Although the bust on the obverse had the same structure as the Heliocles imitation prototype, with a curved line extending forward from the cloak round the shoulders, the facial features are different. The bust also has solar rays like the Begram mint issue, but placed as a crown rather than as emanating from the head. The treatment of the face and the solar crown resemble those on Roman gold and silver coins depicting Augustus posthumously as a divine figure, issued *c.* AD 37–8 (Sutherland 1984, 108, nos 1 and 2) and *c.* AD 68–9 (*ibid.*, 212, nos 115 and 116).

This denomination seems to have been preferred at Mathura as it corresponded in size approximately to the city's earlier currency issued by the local Indo-Scythian satraps Rajuvula, Sodasa and Kharahostes (Cribb 2015). The inscription is the usual round (cursive) letter-form version of the Soter Megas inscription: ΒΑΣΙΛΕΥ ΒΑΣΙΛΕΥΩΝ ΣΩΤΗΡ ΜΕΓΑΣ, accompanied by a three-prong tamga. Like the other local coinages this is also a scarce issue, with only 31 specimens recorded, struck from 14 obverse dies, suggesting that only about 25 obverse dies were used (Esty 2011). The attribution to Mathura is based on reports of this type being found there (Cribb 2014, 98).

B.3 Wima Takto: Kashmir copper coinage (Figs 3.19–3.20)

The coinage of Wima Takto for Kashmir (B.C5-i) is initially a continuation of Kujula Kadphises' bull and camel copper coinage with units and quarters, differing only in its inscriptions and control marks. The inscriptions on the obverse are still blundered Greek, copies of Zeionises/Jihonika coin inscriptions. On the reverse Wima Takto is given full royal titles in Gandhari/Kharoshthi: *maharayasa rayatirayasa devaputra vema takhta maha*[*tasa*] (of king, king of kings, son of the gods, Wima Takto, the great). This issue was replaced by lighter coin (B.C5-ii and -iii), initially issued at about 6g, but quickly falling to *c.* 4g. A few of these coins have traces of the king's name on the obverse ΒΑΣΙΛΕΥ ΒΑΣΙΛΕΥΩΝ ΟΟΗΜΟ …, but mostly they have a corrupt form of this inscription written ΒΥΠΝΕΙ ΒΥΠΝΕΙΝ ΝΟΟΗΔΟΩΜ or similar. The inscription on the reverse of the smaller coins gave the king a shorter title (often abbreviated): *maharayasa rayatirayasa devaputra vema takhosa* (of king, king of kings, son of the gods, Wima Takto). Two coins (B.C5-iv) of this series with part of the [ΒΑΣΙΛΕΥ ΒΑΣΙΛ]ΕΥΩΝ ΟΟΗΜΟ … inscription, have a completely different reverse inscription: [*mahara*]*japotra mahakṣadavasa* … (Falk 2009, 107–8; 2010, 78, 86). Following Glass (2000, 115) the character which resembles *cha* is read as *kṣ*. The term *kṣadavasa* is read as the title ksatrap, usually written *kṣatrapasa* or *kṣatravasa* in Gandhari, so presumably a rendering in a local dialect. In his reading Falk assumes *maharaja* and reads *potra* as 'grandson of the great king' and subsequently as 'nephew of the great king'. There is no discussion of these readings or explanations for why the inscription, if reconstructed in this way, should not be read 'son of the great king'. In any case without any further examples any reading is highly tentative.

The attribution of these coins to Kashmir is based on their following the Kashmir issues of Kujula Kadphises, copying coins of Zeionises, the Indo-Scythian ruler of that region (§A.3). A large hoard of several hundred of the smaller denomination (B.C5-ii) was on the market in India *c.* 1998, suggesting a find in the Indian province of Kashmir. The larger denomination issue (B.C5-i) is a direct continuation of the coinage of Kujula Kadphises and some examples were found in a hoard containing both Zeionises and Kujula Kadphises copper coins (Senior 2001, vol. 1, 193, hoard 45; 2006, 118). The smaller denomination issue was probably introduced to bring the system in line with the Soter Megas coinage, so that two Kashmir coins equalled one Begram

Figure 3.20 Bronze coinage of Wima Takto, unidentified mint (B.C6)
Copper drachms were issued under Wima Takto, probably late in his reign from an otherwise unknown mint. The type shows the king enthroned as in his statue found at Mathura. Only two examples of this type are known and the location of the responsible mint is unclear. As there are only two examples it has not been possible to fully read the inscription, the obverse names the king but the meaning of the reverse is unclear.
a) drachm, pierced to be used as jewellery after it was made (B.C6-i: 603 1922,0423.27, 3.74g, 17mm)

mint unit. Its production was very uniform with very few control marks, but only minor variations in the abbreviation of the Kharoshthi inscription.

A copper issue (B.C6), only known from two examples, one found in Hazara District (Smith 1898), may be part of a reformed version of Wima Takto's coinage for Kashmir or the Taxila region, but until more examples are found it is not possible to know. The coin has an enthroned image of the king on the front with the Bactrian inscription ΟΟΗΜΟ ΤΑΚΤΟΟ [ÞΑΟ] (king Wima Takto). The enthroned figure closely resembles the sculptural figure of Wima Takto, found at Mathura (Rosenfield 1967, pl. 1). The king is flanked by the three-prong tamga found on the Soter Megas coinage. The reverse shows two standing figures in Kushan dress surrounded by an unintelligible Bactrian inscription: ΤΑΡΟΟΑΝΑΧΑΟ.

C–F Coinage of the empire at its peak (Fig. 3.21)

Following Wima Takto's expansion into India, the borders of the Kushan empire appear to have stabilised in the 2nd century, definitely incorporating Bactria, Kapisa, Gandhara, Swat, Taxila, Kashmir, and the Mathura region, and possibly parts of Sind and the Punjab. The Kushans were still active in pursuing military campaigns, as the Rabatak inscription testifies (Sims-Williams 2004; 2015) but these do not seem to have led to the incorporation of new regions (Ch. 2 §D.1.1 and §D.1.2).

Wima Kadphises, Wima Takto's son, built on the Soter Megas monetary reforms of his grandfather and father and established a new monetary system of gold and copper coins which served the whole of the enlarged empire and circulated in all its regions. The main gold mint was located in Bactria/Tokharistan, probably at Balkh, the heartland of the Kushan empire. The main copper mint was located at Begram, south of the Hindu Kush, perhaps because that city was near to the extensive copper mines at Mes Aynak, or simply because Begram had served well under the preceding rulers. From the reign of his son, Kanishka I, regional mints also contributed currency to the system. Each mint's issues were distinguishable by denomination and design, but all were within the imperial monetary system, which allowed their products to circulate throughout the empire. For over a

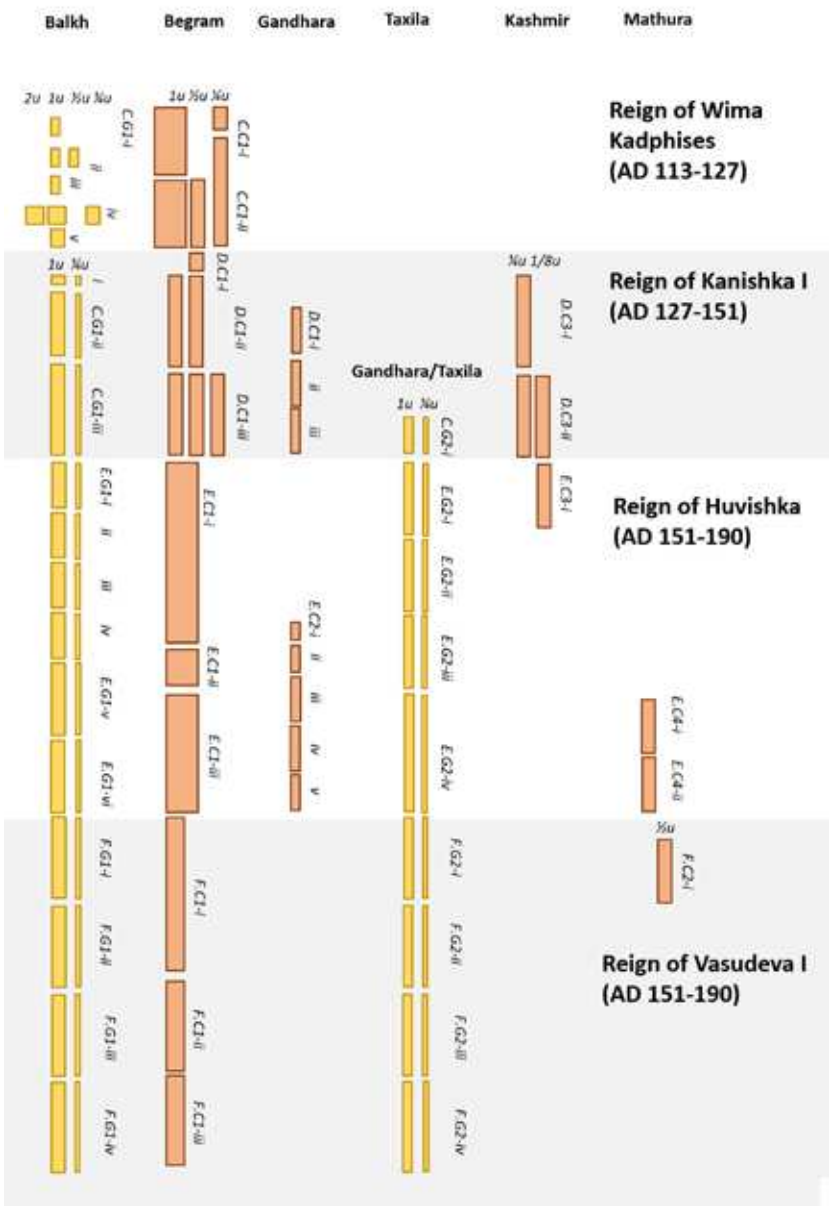


Figure 3.21 Production diagram
Minting diagram for the period from Wima Kadphises to Vasudeva I showing the structure of gold and copper production

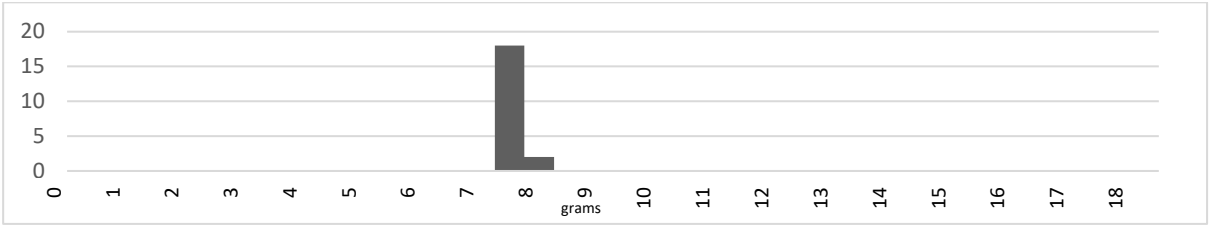
hundred years the empire and the monetary system remained largely intact.

The period of stability came to an end after the reign of Vasudeva I when the empire came under attack, so that its northern territories were captured by the newly formed Sasanian empire and the main gold mint was lost. The monetary system had by this stage been simplified and the coinage was dominated by only two denominations: the gold dinar weighing *c.* 8g (with occasional issues of quarters) and a copper unit the weight of which had stayed stable until midway through the reign of Huvishka. The gold dinar initially remained about the same weight as when it was first issued by Wima Kadphises, but its gold content fell slightly. After the reign of Vasudeva I, the weight of the gold dinar also began to fall slightly and often weighed as little as 7.7g. The copper unit had begun as a tetradrachm on the Attic standard, weighing *c.* 17g, under Wima Kadphises, but from the middle of the reign of Huvishka the weight of this unit was lowered to *c.* 10g and then continued to be periodically reduced until the standard was below *c.* 3g by the end of the dynasty.

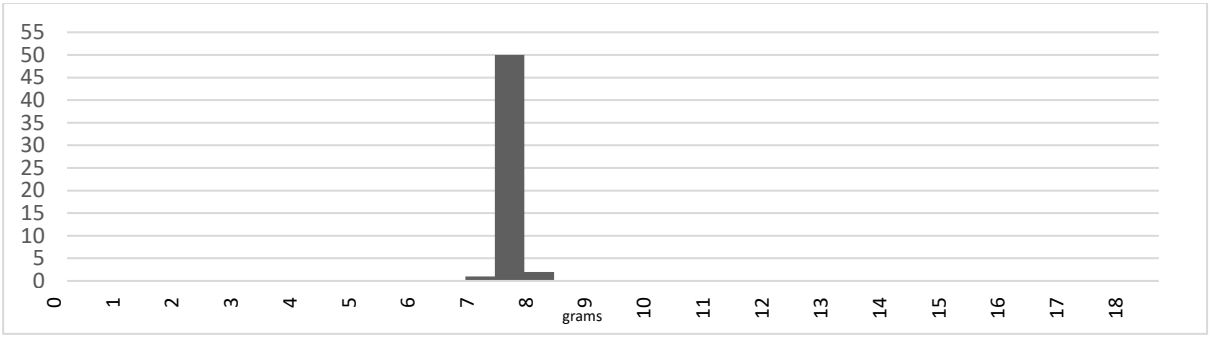
C.1 Wima Kadphises, third Kushan ruler, c. AD 113–27: the initiation of an imperial coinage (Figs 3.22–3.24)

Following the stabilisation of the copper currency under Wima Takto, the Kushan authorities under his son Wima Kadphises set about creating a new copper coinage and introduced for the first time a gold coinage. The new coins seem to have been introduced successfully and resulted in the removal from circulation of all previous Kushan and pre-Kushan coins. This is apparent as hoards of Kujula Kadphises and Soter Megas coins often contain earlier or contemporary issues, while those containing Wima Kadphises coins (which usually also contain Kanishka and Huvishka) rarely contain any earlier coins. A rare exception is a hoard of 30 Soter Megas coins with 66 of Wima Kadphises and 1 of Kanishka found buried in a pit in the temple at Takht-i Sangin (Zeymal 1983, 294, hoard 16; Zeymal 1997b, 91, floor 2, hoard 3). It seems likely that this was an intended consequence of the changes in the coinage. The degeneration of the former silver coinage through debasement under the late Indo-Greek, Indo-Scythian and Indo-Parthian rulers appears to have damaged trust in a

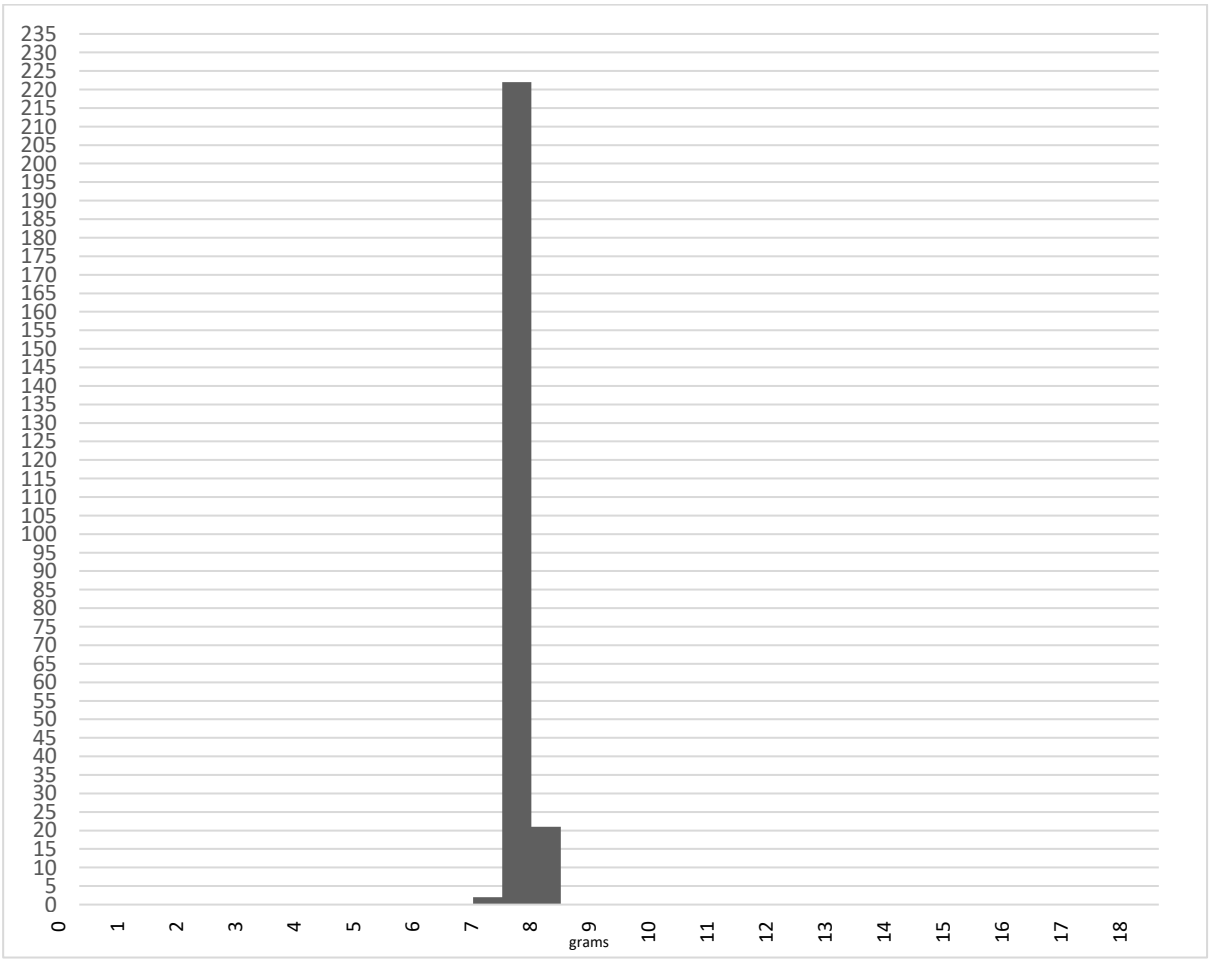
Figure 3.22 Gold coinage of Wima Kadphises (C.G1)
Gold coins were issued in Wima Kadphises' reign from a mint in Bactria in five phases. The first three phases were modest productions and consisted primarily of dinars (*c.* 8g), but the fourth and fifth phase were more substantial and the fourth phase featured double dinars , dinars and quarters. A small number of half dinars were issued in the second and fourth phase. All of the coins depict the king on the obverse with a Greek inscription and a representation of Oesho on the reverse with a Kharoshthi inscription giving the king's name and titles, but the designs and details of the inscription vary considerably.
a) dinar of the first phase, all known examples are struck from a single pair of dies which indicates a very small production (C.G1-i: 604 1886,0302.1, 7.94g, 19mm)
b) dinar of the second phase, which consists mostly of an issue of dinars showing the king facing left and right, with or without a headdress, but with a small number of half dinars, which overlapped with the fourth phase (C.G1-ii: 606 1855,0820.17, 7.95g, 19m)
c) dinar of the third phase depicting the king riding on an elephant. Only two obverse dies were used for this small issue, the second showing the king on a throne (C.G1-iii: 607 1933.0712.1, 7.7g, 20mm)
d–f) double dinar, dinar and quarter dinar of the fourth phase. Each denomination used a different reverse design. The production was much larger than other phases and appears to have been very intense. (C. G1-iv: 608 1894,0506.2, 15.34g, 26mm; 618 1894,0506.3, 7.79g, 20mm; 621 1894,0506.7, 1.98g, 12mm)
g) dinar of the fifth phase. This appears to be the first phase to represent continuous production, and the same workers continued to make coins under Kanishka I. It consisted only of dinars which show the king facing to both left and right (C.G1-v: 624 1894,0506.5, 7.98g, 19mm)



C.G1 (Wima Kadphises)



D.G1 & G2 Kanishka gold dinars



E.G1 & G2 (Huvishka)

Figure 3.23 Weight chart
Weight distributions for gold dinars minted at different mints from the reign of Wima Kadphises to that of Huvishka. Gold was struck to much more precise standards than copper and from a single collection and with half gram baskets on the histograms no differences are apparent. For this reason histograms for subsequent gold issues will not be illustrated

Figure 3.24 Copper coinage of Wima Kadphises, Begram mint (C.C1)
Copper coins were issued in the reign of Wima Kadphises from the Begram mint in two phases in three denominations. All of the coins use a similar design but the two phases are distinguished by the inscriptions, the first phase (a–b) has no inscription on the reverse of the coin and the second phase (c–e) has a Kharoshthi inscription which translates the title in Greek on the obverse. In the first phase the coins were issued as tetradrachms, on the Attic standard of *c.* 17g, and drachms, and in the second phase the coins were issued as tetradrachms, didrachms and drachms.
a–b) tetradrachm and drachm of the first phase with only Greek inscriptions (C.C1-i: 628 1919,0612.2, 17.24g, 26mm; 630 1847,1201.148, 4.28g, 17mm)
c–e) tetradrachm, didrachm and drachm of the second phase with a Kharoshthi inscription on the reverse (C.C1-ii: 650 1894,0506.1872, 17.08g, 28mm; 703 1850,0305.174, 8.65g, 21mm; 709 1922,0424.3598, 3.97g, 18mm)

silver coinage, and a gold-copper system might be a response to this loss of confidence. Gold coinage had never been systematically issued within the territory now ruled by the Kushan kings. The first Greek kings of Bactria, Diodotus and his successors in the late 3rd century, had issued gold, and some Indo-Greek successors, such as Menander in the mid-2nd century BC, had made occasional special issues of gold, but no systematic or large-scale production had ever circulated in India.

The new denomination system devised to replace all earlier coinages consisted of copper and gold coins, denominated according to the Greek drachma system on the Attic or reduced Attic standard. The weight of the copper coins suggests that they were struck, like the Begram copper Soter Megas coinage, using the full Attic weight standard, but with a standard unit of a tetradrachm weighing *c.* 17.0g, replacing the Soter Megas didrachm unit. The gold coinage, with a unit of *c.* 8g, had less clear origins. It was a slightly reduced version of the Attic gold stater denomination (*c.* 8.6g) issued by the Bactrian Greek kings Diodotus I and II, Euthydemus and Eucratides I. It was also close in weight to the Persian gold daric denomination (*c.* 8.3g), and the Roman *denarius aureus* denomination (*c.* 7.75g). At the time of issue Roman gold coins had already penetrated into Kushan territory, so it seems most likely that the *denarius aureus* was partly the inspiration for this denomination. Later texts referring to the successors of this denomination in the Kushano-Sasanian and Gupta periods use the term *dinara*, clearly of Roman origin so it is possible that the term reached back into the Kushan period. Research has, however, shown that, contrary to previous assertions, Roman coins were not melted down to make the new Kushan gold coins (Blet-Lemarquand 2006). The most plausible interpretation is that an 8g standard was chosen because it was broadly compatible with the gold coinages familiar to the Kushans and that the exact standard was selected for internal reasons at the mint.

The new coinage was a multi-denominational system. There were three copper denominations issued: tetradrachm unit (*c.* 17g), didrachm half unit (*c.* 8.5g) and drachm quarter unit (*c.* 4.25g), perhaps to allow points of correspondence with the Soter Megas didrachm coinage and Wima Takto's Kashmir drachm issue. The smaller denominations are scarce in comparison with the common tetradrachm unit and appear to have been dropped from the system soon after it commenced. All denominations have a representation of the king standing and making an offering at a small altar on the obverse and the Kushan god Oesho, holding a trident, with a bull on the reverse. These were accompanied by four gold denominations: the double dinar (*c.* 16g), the dinar unit (*c.* 8g), the half dinar (*c.* 4g) and the quarter dinar (*c.* 2g), of which the dinar and quarter dinar are the most common. The inscriptions and designs of the gold coinage suggest that the copper coinage was issued first (Bracey 2009, 42). It is also possible that the original intention was for the 16g gold coins to be the standard unit, because the *c.* 16g coins were closer in weight than the smaller coins to the standard stater unit used in inscriptions on gold and silver metalware from Bactria and Gandhara. Such objects often carry weight inscriptions in full and reduced versions of the Attic standard, expressed in staters (*c.* 17.5 to 15.2g) and drachms (*c.* 4.25g) (Falk 2001b; Cribb 2020).

There were a variety of designs on the front of the gold coins, showing the king emerging from the top of a mountain, seated on a mountain top, seated on a throne, seated on an elephant, riding in a chariot, looking through a window and looking over a parapet. The commonest design for double dinar and dinar was the king emerging from a mountain top, and for the quarter dinar the king looking through a window. Only three examples of the half dinar have been recorded, all showing the king looking over a parapet. The other designs are only known from a few dies each in the doubles and units. The design on the reverse of all denominations except the quarter dinar is an image of the god who appears on the copper coins, with or without the bull, as most of the coins probably derive their designs from the image introduced at the copper mint. The quarter dinars have a symbolic representation of this god, consisting of his trident with his other attributes attached.

Like most of the coins of the first two kings these coins have a Greek inscription on the obverse: ΒΑΣΙΛΕΥΣ [ΒΑΣΙΛΕΩΝ ΣΩΤΗΡ ΜΕΓΑΣ] ΟΟΗΜΟ ΚΑΔΦΙΣΗΣ, the full form on the copper denominations and some gold, but the abbreviated form, omitting ΒΑΣΙΛΕΩΝ ΣΩΤΗΡ ΜΕΓΑΣ, on most of the gold coins. On the copper coinage, letters are often dropped from the inscription (e.g. ΒΑΣΛΕΥΣ in place of ΒΑΣΙΛΕΥΣ), in an apparently progressive degeneration. The reverse inscriptions are in Gandhari, written in Kharoshthi script, all naming the king with his royal titles. Some of the titles are new to the Kushans and imply the king's imperial status, expanding a title (*iśvara*) used by previous local Indo-Scythian kings (Cribb 2014, 85). The standard version on copper and gold denominations is *maharajasa rajadirajasa sarvaloga'iśvarasa mahiśvarasa v'ima kathpiśasa tratara* (of king, king of kings, lord of the whole world, great lord, Wima Kadphises, the saviour), with a few differences in spelling and in order (the character for *v'i* appears to be an attempt to transcribe the *wi* sound which is rendered by ΟΟΗ in the Greek inscription; see Ch. 2 §B.4). The quarter dinars have a shorter version *maharajasa rajadirajasa v'ima kathpiśasa tratara*. The first issue of copper coins omitted the reverse inscription, having simply the Greek obverse inscription and a reel and pellet border on the reverse, as used on Wima Takto's Soter Megas coins for western Tokharistan (B.C2-ii). The identification of these coins as the first phase is supported by the absence of blunders in their Greek inscriptions. Like the Soter Megas coins, the new coins of Wima Kadphises all bear a Kushan tamga, but in a slightly different form to that used on the Soter Megas coins.

The location of the mints making coins during Wima Kadphises' reign is conjectural (Bracey 2009). The discovery of a trial coin (using dies for a copper drachm) struck in silver at Begram by Charles Masson (Wilson 1841, 347, 355, no. 8) suggests that the Begram copper mint continued to be the main centre for copper coin production. The consistency of the copper coinage of this reign suggests that all the coins or all the dies were made at one centre in Begram. There is no evidence that there were any other copper mints in action

elsewhere using dies from that centre, but the possibility cannot be entirely excluded. At any one time the gold coinage was all made at one mint. The location of that mint is complicated by the changes in procedure and style between each of the five phases of production which suggests that at the start of each phase new personnel were hired and production proceeded for only a short period before being shut down, possibly with no intention of restarting it. There is, however, an overlap of reverse styles in the half dinar denomination (C.G1-ii 1/2d) which shows the continuity of the mint between personnel changes, with one reverse design (1a) resembling phases one and two and the other (1b) resembling phase four. Only with the fifth phase do we begin to see a continuation of production, with the same facility being used for the earliest coins of the reign of Kanishka I. Based on the subsequent continuity and that there is later evidence (see §F.1 and §G.1–G.2 below) that the main gold mint was located in Bactra/Balkh, we assume that is where the mint was established. It is possible that during the first four phases under Wima Kadphises not only the personnel and procedure but also the location was altered, and that the mint was only established at Balkh at the end of the reign. For example, it is possible that the early sporadic issues may represent a gold mint attached to the royal court which may have moved when the king moved.

The production rate of gold coins can be inferred from the limited number of 22 obverse dies used to strike dinars, but as noted already the production was very uneven with gaps in activity, unlike the production of later Kushan coins, and since the second phase copied its reverse designs directly from the already established copper coinage it seems plausible that gold production did not begin with the start of Wima Kadphises' reign. In the fourth and fifth phases of production there were usually two work stations producing dinars, each using an obverse die distinguished by a left- or right-facing royal portrait. In the fourth phase the production of double dinars was more intensive with perhaps three work stations, but with only eight obverse dies involved, likely representing a short intense period of minting. Estimating exactly how long is difficult but readers should imagine weeks rather than months or years (Faucher *et al.* 2009). Production of half dinars relied on just two obverse dies and of quarter dinars on three obverse dies.

Under subsequent kings the deployment of the obverse dies for dinars suggests that new dies were made annually for the two work stations at the main mint, the successor of the gold mint established under Wima Kadphises. If this were applied bluntly to our 22 obverses it would suggest 11 years. If applied to the fifth phase of production it would imply that this operated for four years before the beginning of Kanishka I's reign (Bracey 2009). Similar die estimates are not available for the copper coinage. An examination of 350 examples (Bracey 2009, 42–3) yielded only a handful of die identities, suggesting thousands of dies were used to produce the copper coinage. The most numerous group of Kushan copper hoards is from the Gangetic valley and terminate with the early coinage of Huvishka (at least 20 such hoards with more than 1500 Huvishka examples have been reported, though very few are published). Therefore we would expect the sample of extant Huvishka coins to be much better than that of Wima Kadphises (many of which would have been recycled in the fifty to a hundred years before these hoards were deposited). Only one hoard terminating with Wima Kadphises' coins is currently known: a ritual assemblage from a pit in the Takht-i Sangin temple containing the following coins: Seleucid (x1), Bactrian (x1), Parthian (Phraates IV x69), Kujula Kadphises' 'Heraus' type (x3), Soter Megas (x8) and Wima Kadphises (x2) (Zeymal 1983, 294, hoard 14; Zeymal 1997b, 91, hoard 2; Gorin 2011, 386, hoard 12).

C.2 Wima Kadphises: an imperial coinage

Wima Kadphises' coinage seems to be intended as an imperial currency for the whole Kushan empire as it was centrally produced and is found throughout Kushan territory. The coins all have designs consistent with being produced at just two mints, one for gold and one for copper. The gold coinage seems to have been produced at a mint north of the Hindu Kush, probably at Balkh, while the copper coinage was made at the same Begram mint as the Soter Megas coins of the previous reign. Only one coin attributable to this king does not fit this imperial coinage. It is a so-far unique copper drachm quarter unit, showing the same designs as the other coins, but with the king facing right instead of left and Oesho represented as a bust with janiform faces (one face bearded and one beardless) on the reverse (C.C1-misc 1/4u); probably the idea for the design was derived from a *dvimukhalinga*, two-faced linga representation of Śiva.

The model created by Wima Kadphises' administration for the whole of Kushan territory was successful. Some of the denominations disappeared quickly, but the basic shape of the currency system continued into the following reigns. The double and half dinars were not issued again after their appearance during this reign. Dinars and quarter dinars became the standard gold denominations of the Kushan empire, with the dinar as the commonest gold coin and quarter dinars issued occasionally, but continued in small numbers until late in the dynasty and was occasionally issued as part of the Kushano-Sasanian coinage. The standard copper tetradrachm unit lasted until the end of the empire, the didrachm half unit was discontinued during the next reign and the quarter unit was only common during the next reign. The continuity of the coinage meant that Wima Kadphises' coins still circulated after the end of his reign. His copper tetradrachms were still a significant part of the copper currency until a reduction in the weight standard to *c.* 10–12g midway through the reign of the fifth king Huvishka caused their demonetisation.

The gold coins were of a similar standard and weight to later coins until the reign of Vasudeva I, so some remained in circulation; however, hoards suggest that the bulk of Wima Kadphises' gold coins had ceased to circulate by the end of his reign. The latest recorded hoard containing his coins was found in Ethiopia at the site of the Debra Damo monastery, containing 5 Wima Kadphises doubles of the fourth phase, 5 Kanishka, 88 Huvishka, and 6 Vasudeva I coins from the first phase of production in his reign (Mordini 1960; 1967; Göbl 1970; Whitfield 2018, 57–80). Wima Kadphises' gold coins probably functioned largely as

Figure 3.25 Coin-like votive object
Votive object in the form of a coin depicting a goddess. The treatment of the engraving is virtually identical to that on the gold coinage of Wima Kadphises suggesting that the official mint and the workshops producing these shared personal or a tradition of technical training.
a) gold votive in the British Museum collection (1879,0401.12, 4.33g, 15mm)

largesse (i.e. royal payments and gifts), so did not often enter monetary circulation, as is evidenced by the condition of most surviving examples. As gold coinage was novel in most of the empire there may have been very little economic demand for the coins initially. The change from sporadic production to continuous issues in the final phase of the coinage suggests that either by the end of Wima Kadphises reign or early in the reign of Kanishka's the use of the coins as largesse had been largely supplanted by economic functions. What those economic motivations were, and whether they were driven by the Kushan state or were a response to the coins having found an unintended economic function is unclear. Likewise it is hard to assess how much the prestige of issuing a gold coinage continued to factor in its issue. Though regular, the issue of coins in the 2nd century was still quite slight, certainly compared with the dramatic increase in production seen in the 3rd and 4th centuries AD, which suggests there were further shifts in the economic function of the coinage, the nature of which is largely unknown to us (see §L.1 **Table 3.13**).

The centralisation of minting and standardisation of design in Wima Kadphises' reign had a lasting impact. The Kushan gold continued to be produced by the main mint in Balkh until the Sasanian conquest of Bactria/Tokharistan in the early 3rd century, though usually supplemented by a single subsidiary mint from late in the reign of Kanishka I. The Begram mint dominated the production of copper until Begram fell to the Sasanians later in the 3rd century. Though other smaller mints subsequently opened to make copper coinages in many of the regions that had formerly had mints before Wima Kadphises' reign, none ever made coins on the same scale and all operated with designs drawn from the repertoire of the main mint.

C.3 Wima Kadphises: votive gold coins (Fig. 3.25)

There are two gold non-official coin-like objects of the early Kushan period which have denominations which are close to the system reflected in Wima Kadphises' gold coins, so merit attention here. Although they are coin-shaped they do not have any indication of a state authority on them, so it seems likely that they are religious offering pieces or devotional amulets, both representing a transaction in the spiritual realm.

The first of these is known from two specimens from the same pair of dies, one in the British Museum (1879,0401.12, 4.33g, 15mm, purchased from Chanda Mall, a Rawalpindi dealer) and another in trade (Classical Numismatic Group Triton sale XV, 3 January 2012, lot 1365, 4.28g, 17mm). The designs show on the obverse a goddess in Greek dress wearing a city walls crown and holding a flower in her right hand and her dress in her left, accompanied by the Gandhari/Kharoshthi inscription [*pa*]*khalavadidevada droprasaya* (the invincible goddess of Pushkalavati) and on the reverse a bull walking to right with Greek TAYPOΣ (bull) above and Gandhari/Kharoshthi *uṣabhe* (bull) below (Senior and Babar 1998). Mukherjee (1969, 71–6) misread the inscriptions working from only the British Museum example and then again (1997) from the second specimen and in both cases identified the goddess with the consort of Śiva.

The other piece is unique and was found with the male figure in the excavations of tombs at Tillya Tepe in north-western Afghanistan (burial 4, no. 25, 4.33g, 16mm; Sarianidi 1985, 188–9, 250, pl. 131). The obverse shows a lion standing to right with raised paw, facing a nandipada propitious symbol, accompanied by the Gandhari/Kharoshthi inscription *siho vigadabhayo* (the fearless lion) and on the reverse the figure of Heracles, naked apart from wearing a lion skin (lion's head over his left shoulder and tail hanging behind his leg), supporting a spoked wheel with decorated rim and accompanied by the Gandhari/Kharoshthi inscription *dharmacakraṃ pravatati* (turns the wheel of the law), the whole inscription meaning 'the fearless lion [i.e. the Buddha] turns the wheel of the law' and Heracles attends as the Buddha's companion (Tanabe 2008). It has been suggested that Heracles on this coin is actually an image of the Buddha (Fussman 1987, 71–2; Brown 2000), but there is no basis for such an interpretation, as in Gandharan art a form of Heracles, holding a thunderbolt and so referred to as thunderbolt holder *vajrapani*, is often attendant on the Buddha. Zeymal (1999, 240–1) suggested that the figure represented the Kushan god Oesho, who, as is shown below (§D.4), can be identified with Heracles in the context of the gold coins of Kanishka I's first issues.

Neither piece makes any reference to an issuing authority, but both show religious designs. They are, however, both drachms on the full Attic standard, so represent a specific monetary value and clearly are coin-like in their form. Their relationship, on the basis of their shared weight standard was also remarked upon by Zeymal (1999, 240–1). The Kharoshthi inscriptions on both are written in a similar style, so similar that they could have been made by the same engraver. The style of Kharoshthi is very similar to that appearing on coins of the first three Kushan kings. The fabric of the pieces, their figure engraving and their Kharoshthi script style are also very similar to those of Wima Kadphises' gold coins (C.G1-ii). The Greek letter forms AY in TAYPOΣ are also similar to the forms on the same gold coins, and the P and Σ can be compared with the forms on silver (A.S2-i, reverse 1a) and copper coins (A.C4-i) of Kujula Kadphises.

The date of the Tillya Tepe piece can be assessed on the basis that a worn coin of Kujula Kadphises' 'Heraus' type (A.S2-i) was found in Tillya Tepe burial 1 (Zeymal 1999, 241), dating the burials to the second half of the 1st century AD or later. The presence in north-western Bactria/Tokharistan of a coin made in the same fashion as a piece related to the city of Pushkalavati, i.e. the ancient capital of

Figure 3.26 Gold coinage of Kanishka I, Balkh mint (D.G1)
Gold coins were issued throughout the reign of Kanishka from a mint at Balkh (D.G1) in three phases, as both dinars and quarter dinars. The first phase (a) is distinguished by the use of Greek inscriptions, the second phase (b–d) by a change to Bactrian, and the third phase (e–f) by a more ornate crown and the king's sword pointing to the right. Quarter dinars initially used a different design on the obverse with the king's bust emerging from a mountain (c) but this was soon replaced with a standing figure (d) like the full dinars. All phases used a range of gods on the reverses, only a selection of which are illustrated here.
a) dinar of first phase with Greek inscriptions, with Nanaia reverse (D.G1-i: 719 1929,0725.1, 7.92g, 21mm)
b) dinar of second phase with Bactrian inscriptions, with Nana reverse (D.G1-ii: 728 1894,0506.18, 7.89g, 21mm)
c–d) quarter dinars of second phase, with different obverses, bust emerging from mountain and standing king, both with Oesho reverses (D.G1-ii: 739 1851,0205.1, 1.96g, 12mm; 745 IOC.293, 1.87g, 12mm)
e–f) dinar, with Mao reverse, and quarter dinar, with Pharro reverse, of the third phase, showing king with laddered brim on headdress and sword away from thigh (D.G1-iii: 747 1879,0501.4, 7.91g, 19mm; 769 1894,0506.33, 1.94g, 12mm)

Gandhara, suggests that these two regions were closely linked at the time of their manufacture, i.e. in the period after Gandhara had been added to the Kushan realm in the reign of Wima Takto.

D.1 Kanishka I, fourth Kushan ruler, c. AD 127–51: a cultural reform (Figs 3.26–3.28)

Kanishka I's administration continued the issue of copper and gold coins and extended the innovations established under his father Wima Kadphises. In his first year a cultural shift took place in his coinage; in line with a change described in the Rabatak inscription, inscriptions in Greek were replaced by new ones in the Bactrian language. The decision to make this change, apparently part of an attempt to establish the dynasty's Iranian identity, came during the first year of coin production. For the gold coinage the change necessitated the recutting of the inscriptions on the existing dies to effect it (Cribb 1998b). The recutting involved the rubbing back of the part of the die where the Greek inscriptions were and then cutting a new inscription in Bactrian over the top. On all the dies the obliteration of the Greek dies was not total and traces of the Greek inscriptions

Figure 3.27 Gold coinage of Kanishka I, showing change from Greek to Bactrian (D.G1)
Gold coins issued at the beginning, probably in the first year, of Kanishka I's reign had Greek inscriptions. The obverse dies were recut to have inscriptions in Bactrian, and their reverse dies were either recut or replaced to re-label the same gods in Bactrian. These two coins were struck with the same obverse die and show its original version (a) and Bactrian recut (b).
a) dinar with Greek inscriptions, reverse Moon god labelled Salene in Greek (D.G1-i obverse 2A: 721 1888,1208.539, 7.98g, 21mm)
b) gold dinar with Bactrian inscriptions, reverse Kushan royal goddess Nana (D.G1-ii obverse 2A: 732 1894,0506.19, 7.98g, 21mm)

Figure 3.28 Gold coinage of Kanishka I, Gandhara mint (D.G2)
Gold coins were issued at the end of Kanishka I's reign from a mint in Gandhara, in a single phase as both dinars and quarters. This mint seems to have operated as a subsidiary to the mint at Balkh from which the designs are copied, though the engraving is cruder.
a) dinar with Ardochsho reverse (D.G2-i: 774 1860,1220.195, 7.95g, 19mm)
b) gold quarter dinar, with Miiro reverse (D.G2-i: 775 1922,0424.2753, 1.82g, 12mm)

behind the new Bactrian inscriptions can be seen on all coins struck from both the two initial obverse dies and three of the reverse dies for dinars (**Table 3.3**; coins from the recut Heracles die have not yet been seen, but are likely to have survived) and the first pair of dies for quarter dinars. The same progression from Greek to Bactrian can be tracked in the production of quarter dinars, and further detail in the sequence of die use can be detected in minor corrective recutting of the dies after the transition to Bactrian (**Table 3.4**).

The gold coinage continued the main denominations of the previous reign, the standard unit dinar of *c.* 8g and the quarter dinar of *c.* 2g. The quarter dinars were issued in smaller numbers than the dinars. The main mint at Balkh issued these denominations throughout the reign. Its first phase consisted of coins inscribed in Greek, and its second and subsequent phases, of those inscribed in Bactrian. Later in the reign it was joined by a subsidiary mint, south of the Hindu Kush and probably in Gandhara, which also issued mainly dinars with occasional quarters. The coins of the subsidiary mint were distinguished from those of the main mint only by their style. The exact location of the mint is not known, but the interruption of its production in the reign of Vasishka, when the Sasanians pushed their control of former Kushan territory as far as Peshawar, suggests that it may have been located in that city.

The adoption of Bactrian inscriptions also took place at the main copper mint, and as new mints opened up, the gold mint in Gandhara and copper mints in Kashmir and Gandhara, they also only used Bactrian inscriptions. This standardisation of the treatment of inscriptions was part of the centralisation of control over the monetary system which

	Work station 1				Work station 2			
	Obverse die 1 (Iranian cap)	Reverse dies			Obverse die 2 (crescent)	Reverse dies		
		Greek	recut	Bactrian		Greek	recut	Bactrian
Step 1 Greek dies	Greek die	Nanaia			Greek die	Helios		
		[Heracles]				Salene		
		Hephaistos				Anemos		
Step 2 mixed original and recut dies	Iranian recut	Helios					~~Heracles~~ Oesho	
							~~Hephaistos~~ Athsho	
			~~Heracles~~ Oesho		Iranian recut		~~Salene~~ Mao	
Step 3 dies recut to Bactrian				Miiro				Nana die 1
				Nana die 2				
				Nana die 1				Nana die 2
Step 4 all dies in Bactrian	new die			new dies	new die			new dies

Table 3.3 Steps in production at main gold mint, showing progression from Greek to Bactrian inscriptions on dinars (Salene recut to Mao was discovered after the catalogue was completed)

	Obverse	Reverse
step 1 Greek dies	ORIGINAL DIE	Helios
step 2 mixed dies	no examples seen	
step 3 recut to Bactrian	1st recut to Bactrian	~~Helios~~ Miiro
	1st recut to Bactrian	Nana die 1
	2nd recut correcting detail	Nana die 2
	3rd recut correcting detail	Mao
	4th recut correcting detail	Oesho
	5th recut correcting detail	Oesho recut 1
	6th recut correcting detail	Oesho recut 2
	7th recut correcting detail	Athsho
	8th recut correcting detail	Athsho
step 4 all dies in Bactrian	NEW DIE	Athsho recut 1

Table 3.4 Steps in production at main gold mint, showing progression from Greek to Bactrian inscriptions on quarter dinars (Helios recut to Miiro was discovered after the catalogue was completed)

began with the Soter Megas coinages and was firmly established under Wima Kadphises. Bactrian seems to have been an official court language and with the exception of personal seals, only appeared outside Bactria in official Kushan inscriptions, such as the Rabatak and Surkh Kotal inscriptions. Otherwise private inscriptions in Gandhara were written in Gandhari using Kharoshthi script and in India they were written in Epigraphical Hybrid Sanskrit using Brahmi script. The coin inscriptions and the official Kushan inscriptions were not intended to be read by the public, but were a mark of state control. The only intrusion of scripts that would be more widely understood was the use of single letter Kharoshthi control marks on coins at the Kashmir copper mint.

D.2 Kanishka I: copper coinage (Fig 3.29)

The first phase of the main copper mint at Begram curiously consisted of only the half unit didrachm denomination inscribed in Greek (D.C1-i), but this was quickly replaced by a second phase of full units and halves inscribed in Bactrian. This phase also initially included a brief issue of quarter unit drachms and eighth unit hemidrachms (D.C1-misc-i). In the third phase, half and eighth units were no longer produced, but a small issue of half and quarter units, featuring the Buddha, was made late in the reign (D.C1-iii 1/2u and 1/4u). At a subsidiary mint, apparently in Gandhara, full units were issued in three phases late in Kanishka I's reign (D.C2-i to -iii). The production of this mint was relatively small (see §D.5 below). A brief issue of eighth units might also be associated with this mint (D.C2-iii). A few issues of half and quarter units are also known which cannot be fitted into the normal production at the main and subsidiary mints. At the subsidiary mint in Kashmir (D.C3), however, most of the issues were the quarter unit drachm denomination, perhaps to continue the bull and camel drachm denomination issued under Wima Takto, with a smaller number of eighth unit

Figure 3.29 Copper coinage of Kanishka I, Begram mint (D.C1)
Copper coins were issued throughout Kanishka I's reign from a mint in Begram (D.C1), in three phases. In the first phase coins were issued only as didrachms (a), *c.* 8g, but in subsequent phases as tetradrachms, *c.* 16g, didrachms and rarely drachms, *c.* 4g. The coins use a wide range of gods on the reverse but the designs are homogenous between phases, the first phase being distinguished by the use of a Greek inscription (a), the second by the introduction of Bactrian inscriptions (b–c) and the third by the king wearing a cap with a laddered brim.
a) didrachm of first phase, inscribed in Greek, with Helios reverse (D.C1-i: 784 1894,0506.1417, 8.32g, 23mm)
b–c) copper coins of second phase inscribed in Bactrian, tetradrachm with Oado reverse and didrachm with Oesho reverse (D.C1-ii: 828 1922,0424.2977, 16.39g, 26mm; 847 1922,0424.3605, 8.79g, 20mm)
d) tetradrachm of third phase with Mao reverse (D.C1-iii: 851 1894,0506.1426, 16.33g, 26mm)

pieces also produced. The Kashmir quarter units continued to be issued throughout the reign and into the beginning of the next reign. There are examples of Wima Takto's bull and camel drachms overstruck by Kanishka I's Kashmir mint coins, which suggests the likelihood that they remained in use in Kashmir through Wima Kadphises' reign. There is also the possibility that the Kashmir mint even continued production of Wima Takto's coins through Wima Kadphises' reign.

D.3 Kanishka I: continuity and change

The designs chosen for the obverses of Kanishka I's coinage were derived from those of his father Wima Kadphises, but with some modifications. The predominant design was of a standing king, making an offering at a small altar. The king was shown holding a spear in his left hand and dressed in the same clothes as his father, but without the overcoat. On the first and second phase issues of both copper and gold he was shown wearing two different headdresses: a soft Iranian cap with diadem ties or a crescent on a diadem. In the third phase he was only shown wearing the cap, but with a marked brim. The trident and club devices used on Wima Kadphises' coins were missing. A few rare issues had different obverse designs. Rare quarter and eighth units from the second phase of the main copper mint and quarter dinars from the first to second phase of the main gold mint featured the king's bust emerging from a mountain, similar to designs used for Wima Kadphises' gold coinage. The first phase of copper quarter units from the subsidiary copper mint in Kashmir featured an enthroned image of the king, based on Wima Kadphises' enthroned images on gold coins, but on a high-backed throne. As in some coin designs of his father, Kanishka I is shown on quarter units holding a club and with a covered left hand. A rare issue of quarter units from an unidentified mint shows the king in the usual pose at a fire altar, but holding a club in his left hand.

Two significant changes from the coins of the previous reign were made in relation to the inscriptions on Kanishka I's coins. Firstly, from the beginning of the reign a Gandhari/Kharoshthi inscription was no longer included in the designs, apart from the use of Kharoshthi control marks on copper coins from the Kashmir mint. Secondly, during the first phase of issue the decision was taken to replace the use of a Greek inscription with one written in the Bactrian language, still using Greek script. Bactrian had appeared on one issue each of Kujula Kadphises (A.C2B-ii) and Wima Takto (B.C6-i), but before Kanishka I's adoption of it as the imperial language, it had otherwise only appeared in an inscription mentioning his grandfather Wima Takto. The inscriptions on Kanishka I's coins are simpler in structure than those of his predecessors, only giving his name and royal/imperial title. The obverse inscription in Greek on the initial coinage is ΒΑΣΙΛΕΥΣ ΒΑΣΙΛΕΩΝ ΚΑΝΗΡΚΟΥ (king of kings Kanishka); the subsequent Bactrian version translates this, adding the king's dynastic identity, as ϷΑΟΝΑΝΟϷΑΟ ΚΑΝΗΡΚΙ ΚΟϷΑΝΟ (king of kings Kanishka Kushan). In most cases the copper coinage adopts a shorter version of the Bactrian inscription ϷΑΟ ΚΑΝΗΡΚΙ (king Kanishka), but the full version and variations in the abbreviated form have been recorded on some small issues (D.C1-misc-ii and -iii; D.C2-iii).

Apart from the abandonment of the use of Kharoshthi, the inscriptions on the reverses of the coins issued in the name of Kanishka I took on a new role. Instead of providing a Gandhari version of the king's name and titles, the inscriptions now labelled the image of the deity featured on the reverse. For the first phase the image label was in Greek and from the second phase always in Bactrian.

The reverse designs used for both gold and copper coins under Kanishka I also represented an innovation of practice. Like previous coins in this region and under the earlier Kushan kings, the image on the reverse was normally a deity. The innovation was the use of a multiplicity of deities at the same time. Although there is some difference in their use from gold to copper coinage, 14 different images were used on this coinage. Thirteen deities appeared on the gold coinages and 11 on copper, but some of them only on rare issues. The deities were largely drawn from the pantheon of the Iranian cult of the king and court, but also included images of the Buddha and of Maitreya, the future Buddha.

D.4 Kanishka I: gold coin design function and production system

The changing design features of Kanishka's coinage can be used to create an understanding of some aspects of the progression and administration of the coinage under Kanishka I. Not all the variations in design can be understood, but the basic framework of mint attribution and phases of production can be detected.

The transition from Greek to Bactrian in the gold coin designs provides some very informative indications of the organisation of mint production (see **Tables 3.3–3.4**; Cribb 1998b). The surviving examples of dinars show that two obverse dies were in use at the beginning of the reign and the same level of activity, with no more than two mint workers striking coins at the same time, seems to have continued at the main gold mint through the reign. For the first issue the two obverse dies were distinguished by the different headdresses worn by the king: Iranian cap or crescent. The two obverse dies show that two work stations were in action. For use with these two obverses, six reverses were produced, with the gods Helios, Salene, Anemos, Nanaia, Heracles and Hephaistos. The work stations must have been in the same establishment, probably in the same room, as some of the reverse dies were used with both these obverses. The gradual minor modification of the dies and major recut for introduction of the Bactrian inscriptions show the gradual progression of activity by the two work stations (see §D.1 above, **Tables 3.3–3.4**). The Nanaia and Helios reverse dies started their life being used with the Iranian cap dies and the crescent respectively. Helios was followed by the Salene and Anemos dies and Nanaia by the Heracles and Hephaistos dies, after which the transition to Bactrian began. The Iranian cap obverse die was the first to be recut and used with the Helios die previously used with the other obverse. Then two reverse dies were recut from Heracles to ΟΗϷΟ (Oesho) and Hephaistos to ΑΘϷΟ (Athsho) for use with the crescent obverse die before it was recut with a Bactrian inscription. The Heracles/Oesho die was then re-used with the recut Iranian cap obverse die and the Salene die was recut ΜΑΟ (Mao) to be re-used with the recut

	Main mint			Subsidiary mint	Total
	phase i	phase ii	phase iii	phase i	
obverse dies	2 [recut for phase ii]	17	33	4	54
reverse dies					
Helios	1				1
Miiro	1	7	22	4	34
Nanaia	1				1
Nana	2	20		5	27
Nanashao		4	25	1	30
Salene	1				1
Mao		5	28	4	37
Anemos	1				1
Oesho		23	35	5	63
Athsho		5	1		6
Ardochsho			2	4	6
Lrooaspo			2		2
Manaobago			2		2
Mozdooana			1		1
Orlagno			14		14
Pharro			2		2
Boddo			2		2
total reverse dies	7	64	136	23	230

Table 3.5 Kanishka I dinar dies from known specimens

crescent obverse die. The next step was the cutting of two new reverse dies with Bactrian inscriptions MIIPO (Miiro, replacing Helios) and NANA (Nana, replacing Nanaia), one for each obverse die. The Nana die was first used with the crescent obverse die, and the Miiro with the Iranian cap die. The Miiro die was then replaced by the Nana die, which was then replaced by another Nana die.

This progression of the use of dies at the gold mint has been constructed from about 30 surviving specimens (Cribb 1998b, 93–5). It is likely that more steps in the progression will emerge as further examples are found. From it we can have a clear view that only two work stations existed and that the reverse dies were used in a progression, which began with Helios and Nanaia. The decisions of the administration at this stage were later revised as the Anemos die was not modified into or replaced with a Bactrian version. So far no example of the Heracles die without modification to Bactrian Oesho has been found, but it is likely that examples will eventually be found. As well as traces of the Heracles inscription under the Bactrian Oesho, there are also traces on the die of a different posture and detail for the figure of the god, which suggest that it was a two-armed version like the figure of Oesho on the coins of Wima Kadphises. The use of Helios and Nanaia dies at the beginning of the coinage and the introduction of Miiro and Nana dies after the first six dies had been used, confirms that these two reverse designs commenced the recurring cycle of reverse dies.

The quarter dinar coinage of the gold mint also confirms a similar process, but with only one obverse die in use. The coinage begins with Greek inscriptions and an Iranian cap bust type used with a Helios reverse die. The obverse and reverse dies were recut to Bactrian and all the following reverse dies used with the obverse were cut in Bactrian after the transition in language had taken place. Minor recutting of the obverse die show that the sequence of reverse dies was Helios, Miiro, Nana, Mao, Oesho, Athsho (**Table 3.4**; Cribb 1998b, 95–6). The reverse dies were also recut to keep them in use.

For both the dinar and quarter dinar there are instances of a reverse die being replaced by another die with the same deity: in both cases a Nana die. The recutting of reverse dies and these replacements suggest that there was a need to keep producing coins with the same reverse design beyond the normal usage of the die. The demonstration that there were two work stations in the same location contradicts Göbl's proposal that the reverse designs indicate that there were four officina (workshops), with one god for each workshop (the Anemos and Heracles/Oesho dies had not yet been discovered) involved in the coinage (Göbl 1984, 23). Even after the discovery of the Anemos die he reaffirmed this proposal (Göbl 1993a, 33). The reverse designs appear to have been indicators of a batch or period of production and if a die failed (through breakage or wear or damage to its surface) during the period or batch then it was repaired or replaced (as in the case of the Nana dies) to ensure the necessary production process was completed.

The number of obverse dies recorded for Kanishka I's reign, 50 for the main gold mint and 4 for the subsidiary gold mint, suggests that the main mint was using just over 2 obverse dies, one for each work station, a year (with some of the dies being replacements for broken dies), and that, at the same pace, the subsidiary mint with only one work station active would have only been in production during the last four years of the reign (see **Table 3.5**). The first pair of

obverse dies at the main mint continued in use through one set of reverse dies and into the beginning of the next set, so there is no reason to think that the reverse dies represented periods rather than batches of production. The quarter dinar production at the main mint made use of only one work station (probably interrupting production at one of the two dinar work stations). For a discussion of the significance of the different deities selected for use on reverse dies see Ch. 2 §D.5.2 (see also Ch. 2 §E.5.1).

After the initial set of reverse dies, reverse dies did not use exactly the same set of deities, as Anemos was not replaced by a Bactrian version (ΟΑΔΟ Oado, as featured in the copper coinage) and new deities were later introduced: ΦΑΡΡΟ (Pharro), ΑΡΔΟΧÞΟ (Ardochsho), ΜΑΝΑΟΒΑΓΟ (Manaobago), ΛΡΟΟΑΣΠΟ (Lrooaspo), ΜΟΖΔΟΟΑΝΟ (Mozdooano), ΟΡΛΑΓΝΟ (Orlagno), and ΒΟΔΔΟ (Boddo). The pattern of the use of reverse designs (**Tables 3.3–3.4**) is not stable and changes from phase to phase of the coinage. This could reflect the changing size and number of the batches of production or could have a different rationale. The second phase represented the use of Bactrian inscriptions, but retaining the design of the first phase with the addition of an elephant goad in the king's right hand. The distinction between the obverse dies using different headdresses for the king was only retained for the first few dies of the second phase, after which the crescent was no longer used and the obverse dies were not distinguishable. The third phase was distinguished by a change in the form of the king's headdress, the addition of a marked (laddered) brim to the Iranian cap. The subsidiary mint coinage copied the design of the third phase but in a much cruder style.

D.5 Kanishka I: copper coin design function and production system (Figs 3.30–3.32)

Three copper mints were in production during Kanishka I's reign: the main mint at Begram, and subsidiary mints in Kashmir and Gandhara. They are distinguished by style, denomination system, obverse and reverse types and distinguishing marks. Within each mint's production, changing features, such as the king's headdress, enable them to be sequenced. The location of the three mints is based on the find spots of the various issues. The main copper mint's coins are found throughout Kushan territory, but north of the Hindu Kush are rarely mixed with coins of the other mints. It is presumed that this is caused by the main mint continuing to be located in Begram. The Kashmir mint coins are mostly found at sites south of the Hindu Kush. Rtveladze and Pidaev (1981, 66–72) listed 47 Kanishka I main mint coins from excavations in Uzbekistan and Zeymal (1983, 199–203), 69 from excavations in Tajikistan, but none of the Kashmir mint. The Surkh Kotal excavations (Fussman 1990) yielded only 2 Kashmir coins and 162 main mint coins; in contrast Taxila (Khan 2007a) yielded 80 Kashmir coins and 99 main mint Kanishka I coins. The fabric and denomination also recall Wima Takto's Kashmir mint bull and camel issues and two examples have been seen overstruck on Wima Takto coins. The Kashmir mint coins have also been found in Khotan, which lies at the other end of the mountain passes from Kashmir (Cribb 1984b, 151).

The main mint has no control marks and was issued in three denominations: tetradrachm unit, didrachm half unit and drachm quarter unit. The coins of the subsidiary mint in Kashmir were issued in two denominations, drachms and occasionally hemidrachms, and always have a Kharoshthi letter as a control mark before the king's image on the obverse. Its initial issue also has a different obverse design to the main mint showing the king enthroned, as on some coins of Wima Takto and Wima Kadphises, but subsequently the mint adopted the same obverse design as the main mint. The subsidiary mint in Gandhara, which started production late in the reign, only issued tetradrachm units, distinguished from the main mint's issues in style and by the addition of a tamga on the obverse next to the fire altar after the initial issue.

The main mint began production issuing only didrachms using Greek inscriptions and using similar design features to the beginning of the gold mint's coinage (D.C1-i); the style of engraving suggests that the designs were created by the die engraver who cut the first phase dies for the main gold mint. Two obverse designs were used with the king wearing an Iranian cap or a crescent and only two reverse designs featuring the deities Helios and Nanaia. The obverse and reverse designs were used interchangeably with die links between both obverses and reverses. The second phase of production was of tetradrachm units and didrachm halves with Bactrian inscriptions, using a wider range of reverse designs. Six reverses were used throughout the reign: Nana, Miiro, Mao, Oado, Oesho and Athsho. Initially the king was represented with the Iranian cap or crescent, but the crescent was dropped soon after the issue began. The third phase of coinage was distinguished by the use of the same laddered brim version of the king's headdress as for the gold mint's third phase. The half unit denomination was not continued into the third phase. Towards the end of the third phase additional reverse designs, featuring new deities, Sakamano Boudo and Metrago Boudo, were introduced. At the same time a small issue was also made of half units featuring Sakamano Boudo (from two dies), as well as quarters featuring him (also from only two dies) and the usual set of deities (so far only Mao, Oado and Oesho have been recorded).

The issue of coins with Buddhist images presents an exceptional event in the production of coins under Kanishka. This coinage comes at the end of his reign and as well as the copper issues there are also gold dinars and quarters issued at the same time. The gold and copper coins with Buddhist images were issued in the final phase of both the main gold and the main copper mints (distinguished by the style of crown worn by the king). The dies of the gold coins were engraved by the same engraver as the one responsible for the dies used to strike the early coins of Huvishka from the same mint (E.G1-i, obverses 1A, 1B and 2A), as discernible in the forms of letters used and the treatment of the deities. The two obverse dinar dies and the two obverse quarter dinar dies used with the Buddha reverses were used with other reverse dies, so it cannot be demonstrated that the Buddha coins were the last ones struck in Kanishka I's reign, but they come close to the end of the reign. The engraver who worked across the transition

Figure 3.30 Gold and copper coinage of Kanishka I featuring Buddhist images, Begram mint (D.G1 and D.C1)
Gold and copper coins featuring the Buddha were issued late in Kanishka I's reign from both the Balkh and Begram mints. The coins depict the historical Buddha, Shakyamuni, as a standing figure (a–d), and the future Buddha, Maitreya, as a seated figure (e). The gold issue was of both dinars (a) and quarter dinars and the figure is labelled simply 'Buddha'. The copper coins were issued as tetradrachms with both designs, Shakyamuni and Maitreya, and as hemidrachms and drachm with just Shakyamuni.
a) gold dinar, depicting the Buddha (D.G1-iii: 760 IOC.289, 7.07g, 20mm)
b–d) third phase copper tetradrachm, didrachm and drachm the historical Buddha, Shakyamuni (D.C1-iii: 859 1844,0921.29, 16.82g, 25mm; 864 IOC.296, 8.25g, 22mm; 869 1922,0424.3587, 4.28g, 18mm)
e) third phase copper tetradrachm depicting a seated image of the future Buddha Maitreya (D.C1-iii: 860.2 OR.323, 17.26g, 25mm)

into the next reign seems to have cut at least six obverse dies, so if the obverse die production followed the usual pace of two obverse dies a year, then the Buddha gold coins can be dated to his last three years. The copper coins can also be placed close to the end of Kanishka I's reign as some of the obverse dies used to strike them show the king with a halo, a feature which is not normal at the main copper mint until the reign of Huvishka.

Although the gold Buddha coins were issued using obverse dies which had been used to strike regular coins with images of other gods, the Buddha image copper coinage seems to have been separate from the rest of the

Figure 3.31 Copper coinage of Kanishka I, Gandhara mint (D.C2)
Copper coins were issued late in Kanishka I's reign from a mint in Gandhara in three phases primarily as tetradrachms with a small issue of hemidrachms in the last phase. The coins use similar iconography to the Begram mint but the overall style and many minor features are distinct. There are additional gods, not seen on Begram coins, tamgas are featured on the obverse, and the king's sword is shown projecting to the right.
a) tetradrachm of first phase with Ardochsho enthroned reverse, a design not known at the Begram mint (D.C2-i: 923 OR.5038, 14.23g, 25mm)
b) tetradrachm of second phase, showing a tamga in the left field of obverse, with Athsho reverse (D.C2-ii: 924 1990,0820.1, 15.41g, 27mm)
c) tetradrachm of third phase, showing a tamga in the left field of obverse, with Nana reverse (D.C2-iii: 928 1922,0424.3611, 16.31g, 25mm)
d) hemidrachm of third phase, showing a tamga in the left field of obverse, with Oesho reverse (D.C2-iii: 933 1956,0303.1, 1.97g, 12mm)

copper issues. What distinguishes it is the rapidity and diversity of its production. While most copper coins from the main mint have reverses which only gradually change in style and retain the same form of inscription, the Buddha coins have wide variations in style with engravers using various layouts for the inscription, despite being, as indicated by die links, a very tightly connected group (Cribb 1999–2000). The coinage appears to have been produced in response to a demand for the production of a large number of coins in a short period. Gold Buddha dinars were struck using two obverse and two reverse dies, suggesting that both work stations were involved in their production at the same time. The quarter dinars were struck using one reverse die, but two obverses, interrupting the use of a regular reverse die, again suggesting exceptional activity at the mint. It has been suggested that the coins were produced for a special occasion, perhaps the Buddhist council said by some sources to have been instigated by Kanishka I (see below and Ch. 2 §D.5.1). The rapid production and exceptional minting practices supports such a proposal.

The Gandhara mint coins are absent from the Begram finds of Masson and the Taxila finds of Marshall. They are attributed to Gandhara on the basis that they are found in Pakistan. Although the denomination and design was the same as the main mint, there are various differences which distinguish them from the main mint production, such as the rounded crown and beardless portrait of the king and the position of his sword away from his thigh (as on late gold

Figure 3.32 Copper coinage of Kanishka I, Kashmir mint (D.C3)
Copper coins were issued throughout the reign of Kanishka I from a mint in Kashmir in two phases, primarily as drachms (a–b), but with a small issue of hemidrachms in the second phase (c). The two phases are distinguished by the obverse design, the king is depicted enthroned in the first phase (a) and standing, as on other copper issues of Kanishka I's reign, in the second phase (b–c). The range of gods on the reverse is the same as at the main copper mint at Begram, but there are a number of small differences and no representation of Athsho. Though the inscriptions are in Bactrian the coins feature a range of Kharoshthi control marks, and (this is only apparent upon examination of a large sample of the coins) the king is usually depicted without a beard.
a) drachm of first phase showing enthroned king, with Oesho reverse (D.C3-i: 940 1922,0424.3627, 3.86g, 16mm)
b) drachm of second phase with Mao reverse (D.C3-ii: 988 1894,0506.1435, 4.08g, 18mm)
c) hemidrachm of second phase with Nana reverse (D.C3-ii: 1013 1850,0305.235, 2.63g, 14mm)

dinars D.G1-ii, D.G2-i). The early phases include reverse designs not used at the main mint: Manaobago, Pharro and Ardochsho, all enthroned. The second and third phases also add a tamga (consisting of the right-hand part of the Kushan tamga) in the left field of the obverse, to the left of the altar. Göbl attributed them to Kashmir (his mint B) because they were not part of the coinage of the main copper mint (his mint A). The Kashmir mint and Gandhara mint dies were engraved by different artists who employed different control marks. The attribution to Gandhara also reflects the production of Kushan coins there under Wima Takto and Huvishka, suggesting that it was an administrative centre for the Kushans and a likely place for coins to be made under Kanishka I. Anecdotal evidence points to Swat as being the location where examples of phase two of this mint's coinage are more commonly found and Gandhara for phase three, but more concrete evidence is needed before a firm attribution to Gandhara or Swat can be confirmed. This mint's production must have been fairly limited as phase three is represented by 128 recorded coins struck from 16 obverse dies, which suggests that only 18 dies were used during the phase (using the formula proposed by Esty 2011, 46). From the reported specimens the coins of phases one (8 examples) and two (20 examples) are even scarcer. The limited numbers probably reflect both the short time the mint was active and its limited activities, placing them at the end of the reign, as phase one coins show the king with the laddered hat used on gold coins (D.G1-ii, D.G2-i) in the second half of the reign.

A small issue of hemidrachms with tamgas on the obverse (D.C2-iii 1/8 unit), with the same set of gods (only Mao, Miiro, Nana and Oesho have been recorded) are perhaps also issues of the Gandhara mint, but their style is slightly different so another attribution is possible.

The subsidiary mint in Kashmir issued quarter units and a small number of eighths. The first issue of quarters, showing the king enthroned, was marked on the obverse by a Kharoshthi letter and two more on the reverse, and used five of the reverse designs of the main mint: Mao, Miiro, Nana, Oado and Oesho. The second phase replaced the enthroned king with a standing image copied from the issues of the main mint. The Kharoshthi mark on the front is retained, but not the reverse marks, and the same reverse designs were used. The first phase and the beginning of the second phase use a different inscription to the main mint: KANHÞKI KOÞANO (Kanishka Kushan), but then the normal copper inscription was introduced ÞAO KANHÞKI. This coinage continued into the reign of Huvishka, when the inscription and control marks were modified, but the designs retained (E.C3-i).

Detailed work on the dies used to strike the copper Buddha coinage gives some indication of the scale of overall production (Cribb 1999–2000). Site finds suggest that Buddha coins (Sakamano Boudo, all denominations, and Metrago Boudo types) represented about 1.35% of Kanishka I's copper coinage. Twenty-three reverse dies used in the production of the 109 coins recorded suggests that about 29 dies (Esty 2011, 46) could have been used to strike 1.35% of Kanishka's coinage. This would suggest 93 dies a year (≈2148 dies over 23 years), thirty times the number of dies used for the gold coinage, but these figures are subject to a number of caveats. Firstly, the copper Buddha coins were struck using at least 26 different obverse dies, which is more than the number of reverses. Normally reverse dies significantly outnumber obverse because the reverse die receives the hammer blow, and usually wears out faster, which suggests minting procedures were altered for this production and so die counts may be misleading. There is

also the possibility that since this group of coins was made in a single short period that it was used for a specific purpose and the coins are not accurately represented in site finds. On top of this are all the usual statistical uncertainties in the calculations, and the uncertainty in exactly how long Kanishka's reign was when calculating an annual rate. These factors, depending on how they operated may over or under-estimate the actual production.

A hoard of Kushan coins from the Khalchayan region in Uzbekistan, containing only coins from the main copper mint of Kanishka I (together with copper coins of Wima Kadphises and early full-weight copper coins of Huvishka), had 5 Buddha coins out of 476 Kanishka I coppers, i.e. 1% (Abdullaev 2004). This proportion is in keeping with the restricted content of the hoard, which had no coins from the Kashmir or Gandhara copper mints, and also gives a slightly higher indication of the number of dies used: 126 per annum over 23 years or 116 per annum over 25 years.

The ratio of Kanishka I coins at Taxila also indicates some aspects of the volumes of production. There are 11 half unit coins of the first phase (inscribed in Greek), 80 units and 8 half units of the second and third phase of the main mint recorded and 80 Kashmir mint quarters (Khan 2007a). These figures represent the surviving examples at the Taxila Museum; Marshall recorded the discovery of 159 Kanishka I coins, but he did not record denomination or mint varieties (*ibid.*, 121). From the Surkh Kotal excavations only one first phase coin was distinguished, although there were probably others among the illegible half units, but it is evident that 138 main mint units and 23 half units were found (plus one main mint quarter with Buddha design) and 2 Kashmir quarter units.

From these finds it appears that the half unit was produced in much smaller numbers than the unit (18.4% at Taxila, 14.2% at Surkh Kotal), and from the Taxila finds it seems that the first phase provided more than half of the half units. So it seems likely that production of halves stopped during the second phase, with a small production (one pair of dies) towards the end of the reign with the Buddha halves. The Kashmir coins at Surkh Kotal are negligible and at Taxila represent less than a quarter of the value of the recorded coins (main mint worth 89 units, Kashmir worth 20 units). The production of units at the Gandhara mint is too small to feature among the coins at either site.

D.6 Kanishka I: a new model for Kushan and later coin design

Many aspects of the coinage introduced under Kanishka I became a model for future Kushan coinage. Most subsequent Kushan kings continued the use of a standing figure of the king making an offering at a small altar as the obverse design, even though his immediate successor Huvishka mostly used different obverse designs referring back to the designs used by Wima Kadphises. Kanishka I's reverse design formula of a deity labelled with its name in Bactrian continued to the end of the dynasty, except that by the reigns of the last Kushan kings Shaka and Kipunadha the Bactrian label was often visible only as illegible traces.

The name and title of the king in Bactrian continued to be used on the obverse of Kushan coins until the reign of Vasudeva II, but by the end of his reign its legibility and accuracy suggested that the Bactrian inscription was no longer intended as the main indicator of the issuing king's identity. Even on the coins of Vasishka and Kanishka III the legibility of the inscriptions had become problematic. At Vasudeva II's main mint another form of inscription was introduced: a Brahmi monogram placed in the field of the coin to identify the king. This was an adaptation of the use of Brahmi monograms as control marks introduced under Vasudeva I. Barely legible traces of a Bactrian inscription continue to be seen on Kushan coins until they disappear on the issues of the last king Kipunadha.

The designs initiated by Kanishka I also influenced those adopted by the Sasanian, Hun, Gupta and Kashmir successors of the Kushans (Cribb 2003). Standing king obverse with deity on reverse continued as a design for coinage in South Asia until the Kashmir issues of the 13th century (although the royal image had been interpreted by designers of Kashmir coins as a deity since the 7th century) (Cribb 2016b).

The main gold dinar denomination used for the issues of Kanishka I also persisted until the end of the dynasty and beyond. The quarter dinar became less common as the dynasty progressed, with the last Kushan issues appearing under Vasishka, but it continued to be occasionally issued by the Kushano-Sasanians and Kidarite Huns in Bactria until the mid-4th century. The copper unit denomination established by Wima Kadphises and continued by Kanishka I also persisted, but gradually falling in weight until the end of the dynasty.

D.7 Kanishka I: imitation coinages (Figs 3.33–34)

Both gold and copper imitation coinages are known utilising the designs of Kanishka I's coins.

The gold imitations of Kanishka I dinars appear from their find spots (largely through the coin trade) to have circulated in the kingdom of Samatata in south-eastern Bengal. Their weights show a different lighter standard to the Kushan dinar, ranging down to *c.* 6.5g. The designs of these imitations suggest that they were copied from coins from Kanishka I's second phase with Nana reverse, or third phase with Ardochsho reverse. Nana's lion-protome wand is visible on many of the imitations. One example with Nana type has a copy of the inscription: ONANO (Bose and Nasir 2016, type SAM1A.1a), but the others have pseudo-Bactrian inscriptions (e.g. OKÞNIANA or NOXAÞOÞ, *ibid.*, type SAM1A.1b–c). The types based on Ardochsho often replace the cornucopia with a lotus and have a corrupt version of the inscription (e.g. APOOXPO, *ibid.*, types SAM1A.3 and SAM1A.1a). Both Nana and Ardochsho types have also been recorded with a 'pseudo-Brahmi' inscription (*ibid.*, type SAM1B1). The obverse inscriptions show a similar use of corrupt Bactrian or pseudo-Brahmi. The dating of these imitations is problematic, as little is known about the history of this region before the 6th century. The earliest firmly datable coins from the region are issues of the early 7th-century kings Śaśāṅka (*c.* AD 600–35) and Bhāskaravarman (*c.* 630s, also known as Kumāra). There is an extensive series of imitation Gupta coinage before Śaśāṅka and

Figure 3.33 Gold coinage of the kingdom of Samataṭa in southeastern Bengal (D-imit.G1-i)
Gold coins were issued in the kingdom of Samatata in Bengal in the 5th century borrowing designs from the much older coinage of the Kushans (a-b), particularly those of Kanishka I (D.G1-ii) and Huvishka (E.G1-v or -vi). They were struck at a lower weight than the Kushan prototypes. These coins are anonymous, with pseudo-inscriptions based on the originals. They were succeeded by designs inscribed with the names of local kings, but based on Gupta coinage, while still retaining the adapted Kushan reverse (c).
a) dinar of Samataṭa, 5th century AD, obverse design based on the obverse of Kanishka I coins and a reverse design based on the Ardochsho reverses of Huvishka (D-imit.G1-i: 776 1999,0609.1, 6.72g, 21mm)
b) dinar of Samatata, 5th century AD, obverse design based on the obverse of Kanishka I coins and a reverse design based on the Nana reverses of Kanishka I (D-imit.G1-i: 777 1898,1102.1, 6.64g, 21mm)
c) dinar of Śhridharanarata, king of Samataṭa, late 7th century AD, retaining aspects of the earlier designs based on Kushan types (1999,1001.8, 5.87g, 19mm)

Bhāskaravarman's coins, suggesting a 4th to 5th-century context for these Kanishka I imitations.

The copper imitations are known from two series. Both seem to be a product of the export of Kanishka's units into northern India following their demonetisation half way through the reign of Huvishka, *c.* AD 170. Copper units of Wima Kadphises, Kanishka and Huvishka continued in circulation in northern India for some time after their export (see §E.2 below; Ch. 2 §C.6 and §D.1.1). As the supply of these exported coins dwindled a first series of underweight local copies began to be made unofficially for circulation. Although a few copies of Huvishka coins have been reported (E-imit.C2-ii), most of these copies were of Kanishka I coins with Mao or Miiro reverses. Like the originals these copies were struck, but using very poorly engraved dies. The copies simplified the original designs omitting inscriptions, the details of the king's dress and the iconographic features of the deity. A few copies retain the fire altar and tamga. The understanding of the original designs was poor and the direction of the standing figures was often reversed and many imitations pair two obverses or reverses. The progressive degeneration of the design was accompanied by a lowering of the weight, with examples as light as *c.* 6g recorded. The second series appear to have arisen as a consequence of the struck imitations from northern India, because they exhibit the same simplification of designs. Their production and circulation is shown by hoards to have taken place in Odisha (Orissa), in eastern India, and the neighbouring regions (Tripathy 1986, 35–57). They are distinguished from the northern Indian imitation series by their method of production, cast in moulds, and their apparent official production, suggested by the uniformity of their manufacture and designs. Like the struck series the weight standard continued to fall, dropping as low as *c.* 3.5g. The royal and divine images still appear but in a stylised form showing little understanding of their difference. One late series uses a new design on one side, an inscription, which seems to represent the local name of the coinage *taṅka*, accompanied by a three-hill device. The chronological extent of the coinage can only be surmised on the basis that the inscription is written in a 4th to 5th-century late Gupta-style eastern Brahmi. Their weight and fabric also links them with a cast coinage found in the Odisha region showing a reclining bull and royal inscription, naming an otherwise unknown ruler, called *śrī naṇda* or *śrī caṇda*, again written in the late Gupta style (Tripathy 1986, 84–9).

E.1 Huvishka, fifth Kushan ruler, c. AD 151–90: consolidation of the imperial coinage (Fig. 3.35)

The coinage of Huvishka consolidated the changes made under the two previous rulers, continuing copper units and quarters and gold dinars and quarters. The weight standard of the copper was initially the same as before, but dropped during this reign; however, the weight standard and quality of the gold remained the same. The use of numerous deities on the reverse, as during Kanishka I's reign, was continued. The inscriptions were still in Bactrian, written in Greek

Figure 3.34 Indian imitations of Kanishka I copper coins (D-imit.C1 and C2)
Copper imitations of coins of Kanishka I were made in northern India, struck copies in the Punjab and the Ganges plain in two phases (a–b) and cast copies further east in four phases (c–e). Successive series of imitations drew their designs from previous series of imitations and were steadily reduced in weight. The struck copies seem to be unofficial, but the eastern cast coinage was an official currency in Odisha and Bihar. Distinctions between phases are made primarily on the basis of weight and on the gradual simplification of the designs.
a–b) struck imitations of the first and second phases, made in the Punjab and central northern India (D-imit.C1-i and -ii: 1023 1982,1117.35, 15g, 24mm; 1055 1981,0325.25, 9.06g, 23mm)
c–d) cast copies of the first and second phases, issued in Odisha and Bihar (D-imit.C2-i and -ii: 1091 1895,0704.28, 8.08g, 23mm; 1113 1928,0108.4, 4.68g, 20mm)
e) cast copy of the fourth phase, issued in Odisha, inscribed *ṭaṅka* (D-imit.C2-iv: 1119 1986,0933.2, 4.03g, 20mm)

Figure 3.35 Obverse designs of Huvishka (E.G1 and C1)
Gold and copper coinage in Huvishka's reign had the most diverse range of royal imagery employed under any Kushan emperor. The royal images on his coins were based on the coin designs of Wima Kadphises. The king is depicted on most gold coins rising out of a mountain top, holding a club (a). On copper coins the commonest design is the king riding on an elephant (b). Two other designs also appear in most phases at most mints, showing the king seated on a mountain top holding a club (c) and reclining on a couch holding a cup (d). A few issues show the king standing as on the coins of Kanishka I (e).
a) gold dinar showing Huvishka emerging from a mountain top, holding a club and sword (E.G1-i: 1121 1894,0506.45, 7.92g, 19mm)
b) copper tetradrachm showing Huvishka riding an elephant (E.C1-i: 1341 1847,1201.239, 16.24g, 24mm)
c) copper tetradrachm showing Huvishka seated on a mountain top holding a club and sceptre (E.C1-i: 1424 1922,0424.3612, 15.57g, 25mm)
d) copper tetradrachm showing Huvishka seated on a couch holding a cup (E.C1-i: 1407 1894,0506.1460, 14.44g, 23mm)
e) copper drachm showing Huvishka standing making offering at small altar (E.C3-i: 2040 1922,0424.3609, 4.15g, 17mm)

script and the deities on the reverse were normally labelled. There were, however, some differences from the previous reign, particularly in the choice of design for the obverse and in the wider range of deities on the reverse.

The copper coinage employed three obverse designs, based on some of the designs used by Wima Kadphises, featuring the king riding an elephant, the king seated on a throne with elephant-head legs and the king seated on a mountain top. The main copper mint designs show the elephant-riding king holding a spear and occasionally an elephant goad (*ankus*), the enthroned king holding a cup and sitting with one foot up on the throne, leaning and resting on his elbow, and the mountain-top king holding a spear and club. A few variations appeared at the subsidiary mints: a standing king at the Kashmir mint, and the elephant-riding king held a club on early issues at the Gandhara mint. The early issues of the Gandhara mint also included very rare examples of a standing king obverse (E.C2-ii, obverse 4A) and the enthroned king reclining with both feet on the throne (E.C2-ii, obverse 3A). The Mathura mint used the design of the main mint, but drawn with less detail. The copper coins normally have the inscription naming the king and his imperial titles: ÞAONANOÞAO OOHÞKE (or OOHÞKO) KOÞANO (king of kings Huvishka Kushan), but his Kashmir mint coins omit the imperial title: OOHÞKO KOÞANO (Huvishka Kushan). The 11 deities who were featured on the reverses of Huvishka's copper coins were initially similar to those on Kanishka I's copper coins, but the Gandhara mint also featured new deities and made more use of the deities who were scarce on Kanishka I's coins. The first issue of the Gandhara mint also replaced the deities' labels with a Kharoshthi inscription *yodhavade*, apparently naming the local governor. On one rare group of later Gandharan mint coins an image of the local governor, with his name and title in Bactrian, was depicted kneeling before the goddess Nana.

Like the copper coinage, the gold coinage also featured three different obverses: king riding elephant (E.G2-i 1d, obverse 2A), king seated on mountain top (E.G2-i 1d, obverse 1A; E.G2-i 1/4d, obverse 1A; E.G1-v, obverse 1A), and king emerging from mountain top (*passim*), derived from Wima Kadphises' coin designs, but the king emerging from the top of the mountain was the most frequently used, as it had been under Wima Kadphises. Through the reign there were various versions of the king emerging from mountain design, with early coins showing the king holding a club and the hilt of his sword and the later coins showing him holding the club and a spear or sceptre. There were many variations in the detail of the king's dress and regalia. Rare issues showed only the bust of the king (E.G2-iii 1d, obverse 1A; E. G2-iii 1/4d, obverse 1B). The inscriptions were the same as those used on the normal copper coins ÞAONANOÞAO OOHÞKE (or OOHÞKO or OOHÞKI) KOÞANO. The 27 deities featured on Huvishka's gold coins were more numerous than those used for Kanishka I's coins.

E.2 Huvishka: coinage problems

About half way through Huvishka's reign a crisis of an unknown kind upset the production of coinage at both gold and copper mints. The impact on the gold coinage was of small consequence as the weight standard and fineness of the coinage were only slightly affected. The crisis can be seen in the gold mints continuing to use obverse coin dies well beyond their usual lifespan. This was achieved by repeated recutting of the dies, so that the designs remained intelligible, but the quality of the design deteriorated considerably. Accompanying this, new reverse dies continued to be put into use, but the quality of their engraving was very poor, with many mistakes in the inscriptions. When the crisis was over, new well-executed designs were introduced with the creation of new obverse and reverse dies (king holding spear or staff appeared at this point, and previously unseen deities).

The impact on the copper coinage was more significant. As the crisis progressed, copper coins of lower and lower weight were produced by the main copper mint. The subsidiary mint in Gandhara was not affected in this way. The Kashmir copper mint seems to have already ceased production before the crisis. Once the crisis was over, the production of coins at the main mint came back under control, but through the issue of coins on a lower *c.* 10g weight standard, replacing the *c.* 17g standard unit created under Wima Kadphises, and continued into the early reign of Huvishka. The subsidiary mint in Gandhara also changed to this new lower standard and when a new mint was opened in Mathura the same lower standard was used. The cause of the crisis is unknown and various suggestions have been made, such as invasion, civil war, earthquake or plague. For example, the period of the crisis close to the middle of Huvishka's reign (*c.* AD 151–86) coincided with the period when the so-called 'Antonine Plague' also known as 'Galen's Plague' was disrupting the Roman empire (*c.* AD 165–80) (see Ch. 2 §E.1). Alongside the problems created for the official coinage, there was also a widespread spate of unofficial copper coin production, imitating the underweight coins of the main copper mint. The illegal production of unofficial coinage created a huge mass of underweight poorly produced copper coins. This had an impact in Gandhara too, where underweight copies of the local mint's coins also took place, but normally at a higher weight than the copies of the main mint.

Although a range of coin designs continued to be issued after the crisis, both at the gold and copper mints, there was a gradual reduction in that range towards the end of the reign. The main gold mint's final phase was almost entirely devoted to the production of coins with Ardochsho reverses. A similar trend, but less marked, can be seen at the subsidiary gold mint. The main copper mint's final phase consisted entirely of the production of Oesho reverse coins (E.C1-iii) and the Gandhara mint's, of Ardochsho reverse coins (E.C2-iv and -v).

E.3 Huvishka I: gold coin design function and production system (Figs 3.36–3.38)

In so far as the evidence will allow, the same basic production of gold coinage continued throughout Huvishka's reign following the pattern which had been established at the end of the reign of Kanishka. Two mints operated, with the main mint (G1) employing about twice as many dies as the subsidiary (G2), and where evidence is available it shows a similar distinction between the two work

Figure 3.36 Gold coinage of Huvishka, Balkh mint (E.G1)
Gold coins were issued during the reign of Huvishka from a mint at Balkh in six phases, primarily as dinars but also as occasional issues of quarter dinars. The first three phases (a–f) used similar designs, with the first being distinguished from the second by the absence of a bar on the tamgha and the third by its crude portraits. The fourth phase introduced a different portrait of the king, in which the king often appears younger (g–h). The final phases (i–k) are distinguished by a new design for the king's portrait holding a spear or sceptre and wearing a decorated tunic and overcoat, the final phase (h) being distinguished by a band tied around the crown. The reverses of the coins employ a wide range of divinities in a pattern of use which changed over the phases.
a–b) dinar of first phase with Skando Kumaro and Bizago reverse and quarter dinar with Sarapis reverse (E.G1-i: 1127 1879,0501.21, 7.87g; 1129 1893,0506.19, 1.97g, 12mm)
c–d) dinar of second phase with Mao reverse and quarter dinar with Nana and Oesho reverse (E.G1-ii: 1130 1894,0506.53, 8.05g, 18mm; 1147 1888,1208.558, 1.96g, 13mm)
e–f) dinar of third phase with Ardochsho reverse and quarter dinar with Miiro reverse (E.G1-iii: 1153 1879,0501.48, 7.94g, 20mm; 1168 1888,1208.549, 1.96g, 12mm)
g–h) dinar of fourth phase with Mao reverse and quarter dinar with Miiro reverse (E.G1-iv: 1173 1879,0501.52, 7.87g, 19mm; 1185 IOC.315, 1.99g, 13mm)
i–j) dinar of fifth phase with Shaoreoro reverse and quarter dinar with Mao reverse (E.G1-v: 1193 1879,0501.16, 7.97g, 19mm; 1237 1888,1208.545, 2.00g, 12mm)
k) dinar of sixth phase with Ardochsho reverse (E.G1-vi: 1247 1879,0501.46, 8.01g, 20mm)

Figure 3.37 Gold coinage of Huvishka, Gandhara mint (E.G2)
Gold coins were issued during the reign of Huvishka from a mint in Gandhara in four phases, primarily as dinars but also as occasional quarter dinars. The second phase (c–d) is distinguished from the first (a–b) by the addition of a bar to the tamga, the same change that is seen at the Balkh mint (see Fig. 3.30), the third phase (e–f) by changes in style, and the fourth phase (g–h) by the adoption of a new portrait for the king, similar to that used at the Balkh mint. That the changes between phases seem to follow those of the Balkh mint (E.G2) suggests this mint was a subsidiary operation. The mint employs a similar range of divine images to the Balkh mint of which only a sample are illustrated.
a–b) dinar of first phase showing king on mountain with Nana reverse and quarter dinar showing king emerging from mountain with Pharro reverse (E.G2-i: 1255 IOC.328, 7.75g, 19mm; 1259 1894,0506.87, 1.98g, 12mm)
c–d) dinar of second phase with Oesho reverse and quarter dinar with Miiro reverse (E.G2-ii: 1270 1879,0501.28, 7.88g, 19mm; 1273 1847,1201.259, 1.95g, 13mm)
e–f) dinar of third phase with royal bust and quarter dinar with king emerging from mountain, both with Miiro reverse (E.G2-iii: 1278 1879,0501.77, 7.79g, 19mm; 1299 1860,1220.207, 1.92g, 12mm)
g–h) gold dinar of fourth phase with Ashaeichsho reverse and quarter dinar with Miiro reverse, both with king emerging from mountain and wearing cloak over tunic (E.G2-iv: 1325 IOC.302, 7.96g, 22mm; 1331 1857,0813.72 1.98g, 13mm)

Figure 3.38 Gold coinage of Huvishka with a wide range of reverse (E.G1 and E.G2)
Gold coins issued at both gold mints in the middle of the reign of Huvishka used a range of divinities but with a greater variety of designs. Briefly, during the fifth phase at the main mint (a–b), and at the end of the third (c) and beginning of the fourth phase of the subsidiary mint, the range of divinities was greatly expanded, including representations such as the Oxus/Wakhsh river god (Bactrian O[a]chsho), the star goddess Tir (Bactrian Teiro) and the Iranian goddess of justice Arshtat (Bactrian Rishti). These divinities were used as part of the mint control system as had been the practice since Kanishka I but the reason for the extensive range is unclear.
a–b) dinars of fifth phase at the main gold mint, showing Oachsho and Teiro reverses (E.G1-v: 1207 1893,0506.21, 7.89g, 20mm; 1223 1879,0501.12 7.95g, 21mm)
c–d) dinars of third phase of the subsidiary gold mint, showing Ochsho and Rishti reverses (E.G2-iii: 1297 1893,0506.20 7.87g 19mm; 1298 1894,0506.75, 8.02g, 20mm)

stations of the main gold mint (necessitating two obverse dies to be in use simultaneously) and the one work station of the subsidiary mint.

Based on the known sample of Huvishka coins there would have been between 160 and 190 obverse dies originally employed, with about six times as many reverses. Since Huvishka came to power sometime between the year 23 (Kanishka's last inscription: Skinner 43) and 26 (Huvishka's first: Skinner 49) and his reign ended between the years 60 (his last inscription) and 64 (Vasudeva's first), it is immediately apparent that this cannot be explained by a regular use of two dies a year at the main mint and one at the reverse; there are too many dies. However, something more complex, and a little less consistent, along those general lines probably did exist. If we imagine that each year the mint was given permission to create two new obverse dies (in the case of the main mint) and that the subsidiary mint received instructions from the main (about designs and other

Mint/Phase	Ardochsho	Mao	Miiro	Nana	Oesho	Pharro	Ashaeichsho	Athsho	Dionysus	Maaseno	Skando-Komaro Bizago	Skando-Komaro Maaseno Bizago	Heracles	Iamsho	Lrooaspo	Maiissoph	Manaobago	Oxus	Oanindo	Ahuramazda	Oron	Rishti	Sarapis	Shaoreoro	Teiro
E.G1-i	x	x	x	x	x					x	x												x		
E.G2-i	x	x		x		x				x			x												
E.G1-ii	x	x	x	x		x					x	x					x						x		
E.G2-ii	x	x	x	x	x					x															
E.G1-iii	x	x	x	x		x											x								
E.G1-iv	x	x	x			x																	x		
E.G2-iii	x	x	x	x	x	x												x			x	x			
E.G1-v	x	x	x	x	x	x		x	x			x	x	x	x			x	x	x				x	x
E.G2-iv	x	x	x	x	x	x	x	x								x						x		x	
E.G1-vi	x		x	x		x																x		x	

Table 3.6 Distribution of divinities by mint and phase in the reign of Huvishka

elements), and that both mints then regulated batches they produced by employing successively six different designs of reverses, we would be wrong but we would not be very far wrong. What evidence is available to explore this problem will be discussed below.

The products of the two mints are fully distinguishable only as a result of the die studies performed on these coins over the last 40 years. In general the image of the king on coins of the main mint (E.G1) is distinguished from subsidiary mint coins (E.G2) by the drawing of the king's club in the early phases. The main mint shows the club decorated with nodules, but the subsidiary mint shows it with lines and, from the second phase, with small dashes extending from its tip. In the later phases the subsidiary mint coins are distinguished by the king wearing a cloak over his tunic. However, these distinctions are not absolute and such details may be obscured on individual coins. Consistent stylistic differences indicate that the mints did not share engravers, and the close similarity in royal imagery, as well as some procedural overlap and similar employment of the pantheon (**Table 3.6**), suggest that they received common prototypes, either both directly from a central authority or generated by the main mint and distributed to the subsidiary.

Main mint production can be divided conveniently into six phases, and that of the subsidiary mint into four. The first four phases of the main mint correspond to the first three phases of the subsidiary mint, while the fifth and sixth phases of the main mint correspond with the undivided fourth phase of the subsidiary mint. This division is what is meant when referring to 'early' and 'late' gold coins of Huvishka. In terms of the number of dies, approximately 61% of the main mint's dies belong to the early part of the reign and about 53% of the subsidiary mints. This suggests that the major change in design, which was accompanied by some disruption, at least at the subsidiary mint, occurred a little after the middle of the reign, possibly in the period AD 170 to 175.

Both mints made primarily dinars with an occasional issue of quarter dinars. On both sets of coins the normal depiction of the king is of his torso holding a club in front of his face and the hilt of a sword with his left hand (later a spear or standard). In the early phases he wears a simple tunic with a jewelled collar, a crown fitted with a diadem and a two-pronged badge device. In the later phases the tunic becomes an elaborately decorated tunic and the crown is shown with a series of dots probably indicating jewels.

The first phase of the main mint (E.G1-i) is distinguished by the use of a tamga device without a crossbar. In the gold coinages changes in the tamga are made at both mints and distinguish the first phase from all subsequent phases, unlike its use in the copper coinage where it distinguishes different mints. This first phase employs eight depictions of divinities, some of which are different Kushan figures associated with Maaseno, including for the first time Sarapis.

The second phase of the main mint (E.G1-ii) largely continues the features of the first phase but now with a bar on the tamga.

The third phase of the main mint (E.G1-iii) is distinguished by the new engraver whose depictions of the gods on the reverse are often quite crude, giving their faces an elongated appearance. Several of the dies in this phase show significant amounts of wear and it is possible that they were kept in use for an extended period.

The fourth phase of the main mint (E.G1-iv) sees a new, significantly more skilled engraver take over die production. Though the portrait is clearly drawing from the same prototype the stylistic change is dramatic, resulting in what appears to be a much younger king. Previous studies have attempted to read the apparent age of the portrait as a chronological indicator but the difference is probably more apparent to us that it was to contemporaries.

The fifth phase of the main mint (E.G1-v) sees the introduction of the new obverse portrait adopted at both

Figure 3.39 Gold coinage of Huvishka during period of crisis (E.G2-iii)
In the middle of Huvishka's reign a crisis impacted on the production of coinage. At the subsidiary mint during its third phase the supply of new obverse dies seems to have failed, so the current die had to continue in use long beyond its normal lifetime. Surviving examples of the coins struck with this obverse die show its gradual deterioration, recuts and repairs (illustrative details are enlarged in the figure). The reverses, not illustrated, often show mistakes of iconography and spelling.
a–c) dinars of the first stage, the wear on the die is apparent in the degradation of the inscription, cracks in various places, such as from the lip (b), and at a later stage a pit appears in the die below the right arm (c). There are attempts at this stage to correct some of the detioration by recutting the die but the effects are minor (1282 1879,0501.76, 7.88g, 19mm; 1286 IOC.331, 7.93g, 20mm; 1292 IOC.343, 7.93g, 19mm)
d–e) dinars of the third stage, this stage marks a major recutting of the die, noticeable particularly in an additional band on the cap, more flames around the shoulders and a dotted decoration on the tunic (d), the cracks on the die continue to extend particularly around the arm (e) (1283 IOC.318, 7.96g, 19mm; 1284 1879,0501.65, 7.89g, 20mm)
f–g) dinars of the fourth and fifth stage, after the third stage the engravers abandon attempting to repair the inscription but continued to recut the image, the most notable changes being the addition of arm bands on the left arm (f) and four dots above the club (g) whose elaborate decoration seem to prefigure the design of the next stage, suggesting the engraver had knowledge of that new iconography (1296 1879,0501.10, 7.9g, 20mm; 1285 1879,0501.74, 7.76g, 19mm)

mints with the king in a highly decorated tunic. Two unusual obverse designs appear briefly in this phase, one in which the king appears to wear a turban (2A) and one in which he is depicted cross-legged on a mountain top (1A). This phase is notable principally for the range of divinities depicted on the reverse. Seventeen different divinities are known, compared to between 5 and 8 at most other periods. The subsidiary mint also expands its range of divinities at the same period (E.G2-iv), though only as far as 11. An increased range meant that the mint used the individual dies only for a brief period, and many surviving coins are made with reverse dies showing no significant wear. The often remarked-upon diversity of the divinities on Kushan coins rests almost entirely on this period. For example, Dionysus, Iamsho, Ahuramazda and Teiro are known only from this issue, and two gods, who may in fact be blundered inscriptions, Ashaeichsho and Maiissoph, are known only from the subsidiary mint at this period, while others, Shaoreoro, Rishti, Oxus, and the doubtful Oron (perhaps an alternative for Oxus), are only known from the latter half of Huvishka's reign.

The sixth phase of the main mint (E.G1-vi) is distinguished by a device on the king's crown which represents an additional diadem with ties at the back of the crown (which has been mistaken for a horn, Shenkar 2017, 58–60). The mint returns to a restricted range of divinities, but retains Shaoreoro, introduced in the previous phase, as one of the main images.

The first phase of the subsidiary mint (E.G2-i) begins with a set of obverse designs drawing on the same imagery as the copper, showing the king seated cross-legged on a mountain top (1A) or riding on an elephant (2A) before adopting the same design as the main mint, but executed by a different, probably its own, engraver, who replaced the nodules on the king's club with lines. This suggests that the subsidiary mint could receive prototypes from both the main mint and from a central authority at different times.

The second phase of the subsidiary mint (E.G2-ii) introduces the bar on the tamga as at the main mint and adds projecting lines to the king's club. The portraits are usually well executed and the inscriptions competently engraved.

The bulk of the third phase's production (E.G2-iii), which was likely contemporary with the final early coins of the main mint (E.G1-iv) and the first issues of the late coins (E.G1-v), seems to have used just one obverse die. Referred to as iii.1 by Robert Göbl this die must have been use for a number of years. If the discrepancy in the ratio of obverse to reverse dies between the main and subsidiary mints is a guide it seems to have been used for three to four years, about four to five times longer than would be usual. The wear it experienced has been very informative about practice at the mints (see §E.4 below). Unfortunately it is not possible to establish why this happened. As suggested above, the empire experienced some form of crisis (see §E.2 above), and that may be connected with the reduction in weight of the copper coinage.

The fourth phase of the subsidiary mint (E.G2-iv) begins with the replacement of die iii.1 with a new die based on the revised late portrait of the main mint, but distinguished by the addition of a cloak over the king's shoulder. Just as at the main mint there seems to be an increase in the number of divinities depicted on the reverse of the coins, though this is complicated by the suspicion that subsidiary mint engravers were ignorant of the religious basis of the depictions and sometimes exaggerated the range of divinities by mismatching or simply inventing label inscriptions.

E.4 Huvishka: die iii.1 at the subsidiary mint (Fig. 3.39)

Our best evidence for how the mints operated comes from the subsidiary mint during the crisis period discussed above.

Amongst the Huvishka coins presented by Robert Göbl one of the most numerous obverses was his iii.1 (1984, 24–5, types 317–35; E.G2-iii, obverse 1B, e.g. no. 1278). This die had been extensively recut throughout its life, apparently to retain a design which was simply wearing out from constant re-use. It was the last die employed, before the introduction of new designs, at the subsidiary mint at the end of its third phase and die links with the first coins of the fourth phase. This die marked the crisis which appears to have required that it remain in production for a very long time. Unusually at this period the die is employed with a very large number of reverses and the resulting damage to the die and recutting of the surface makes it possible to put the issue of known examples in a relatively precise order. On the basis of this order it is possible to see the sequence in which different reverses were employed.

Tracing wear on the surface of a die by comparing coins is complicated by striking effects (such as the die moving between blows or the pressure of blows being uneven) and by the wear the coin itself has undergone. So, although 72 examples of Göbl die iii.1 are known to the authors, not all of them can be placed into a sequence, either because the coin itself is worn or because photos of them are too poorly lit or of too low a resolution.

Of the examples that can be used to understand the sequence of dies even the earliest ones show some small centrifugal fractures in the surface of the die. As striking continued a pronounced crack appeared extending from the king's upper lip, while cracks to the right of the club expanded and the definition of the letters slowly deteriorated. A pit flaw (caused by a small chunk falling out of the surface of the die) then appears on the king's tunic (see **Fig. 3.39c**). This allows the coins made at this early stage to be divided into at least three different phases.

During the third phase it appears an engraver starts to make small alterations to the die, possibly intended to strengthen fading parts of the design. These are relatively subtle and like the gradual degradation of characters are hard to distinguish on coins photographed under different lighting conditions and showing markedly different levels of wear. What is clear is that those coins with the god Pharro depicted on the reverse show consistently stronger letter forms than other coins showing the features of the third phase, suggesting a still later phase of recutting or wear. **Table 3.7** illustrates the designs divided by these four phases (marked o/I to o/IV).

It is tempting to see this as a progression, Nana -> Miiro -> Pharro -> Nana -> Miiro, with the left-facing Nana then replaced by a distinct right-facing design. However, while a general pattern of that sort is clear it is not a complete

Types	Ardochsho			Miiro			Nana			Pharro			Oxus?			Rishti		
recut stages	Des	n	d_o	Des	n	d_o	Des	n	d_o	Des	n	d_o	Des	n	d_o	Des	n	d_o
0/I				3b	1	1	4i	4	1									
0/II				3b	5	3	4i	1	1									
				3c	1	1	4h	1	1									
0/III										6b	6	2						
0/IV				3a	1	1	4i	4	2									
							4f	1	1									
							4c?	1	1									
1/I	1d	2	2	3c	1	1	4e	4	1									
				3e	2	1												
1/II				3e	2	1	4e	2	1				17a	8	4	21a	1	1
2							4e	2	2									
3	1e	3	1				4e	1	1				17a	2	1	21a	3	1
							4c	1	1									
							4g	7	2									

Key: recut stages 1 = major recut, /I = deterioration
Des = catalogue reverse type design
n = number of coins known
d_o = number of dies

Table 3.7 Transitions in die iii.1 with obverse types known (number of coins/dies)

explanation. The use of the same designs (but not the same dies) for both Miiro and Nana with both first phase and second phase obverses shows that the mint cannot have made entirely Nana coins then switched to entirely Miiro types, though the preponderance of dies suggests a transition from mostly Nana to mostly Miiro.

After the initial period of deterioration in the surface of the die and some possible remedial attention by an engraver the die was substantially recut. The engraver added an additional line across the crown, which on unworn examples is a very clear indicator, but also strengthened the lines of the club and added a series of dots on the king's tunic. They may also have deepened some of the engraving for the inscription to render it clearer.

The act of recutting is informative in and of itself. The mint could recut a die in order to alter its appearance (as was done at the beginning of the reign of Kanishka) or (as seems likely here) to extend the working life. In the latter case it implies that the engravers were not at liberty to simply make new obverse dies as they saw fit, and that some administrative restriction required that the same obverse remain in use.

Die iii.1 continued to deteriorate until it was recut once again. This recutting is very interesting. Cracks continued to develop around the king's left arm and at this point the engraver alters that section to convert the cracks into a series of arm bands. This and the other changes foreshadow the revised design in the fourth phase of the coinage in which the king wears a heavily decorated tunic. It is unlikely the engraver's choices directed that future change, so the most plausible explanation is that the engraver already knew about a change in royal iconography. Either the main mint had already begun the production of phase four coins but the subsidiary mint was not yet authorised to make new dies, or the royal iconography which coins drew on had been altered but a design had not yet been provided for the coinage.

A final recutting of the die is indicated by the conversion of the three spikes which adorn the top of the king's club into a pattern of four dots. Two of the dies, that depicting Rishti and a die depicting Nana, were in use both before and after this cut. The Rishti die was subsequently recut and used again when the mint had produced an obverse die in the fourth phase. This indicates that dies were retained on occasion, and if necessary could be re-employed.

The most significant information drawn from this period at the subsidiary mint is that dies employing the same reverse type were frequently used close together in time, which demonstrates that the reverses were associated with some system that had a strong temporal or batch component (as already seen in Kanishka I's early gold dinars and quarters; §D.4). Exactly what this internal control was remains elusive, but it seems plausible given both the behaviour apparent at this point and the earlier use of gods in a sequential manner under Kanishka I, that the reverse devices were used primarily to fulfil some internal administrative function of the mint. No doubt they were drawn from an approved range of divinities but it would be dangerous to read much about imperial policy or religious practice into their use.

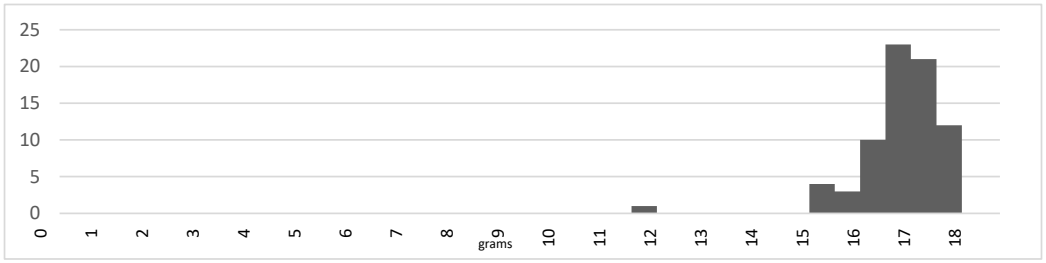
It is also worth drawing attention to the use of six reverse dies with obverse die III.1 during the period of this crisis. Though in this phase of production the god Wesho is also used at this mint no extant coin links a Wesho reverse to this die. This pattern of six distinct reverse divinities recurs frequently throughout Kanishka's and Huvishka's gold coinage and likely represents some high-level decision on the organisation of production.

Figure 3.40 Copper coinage of Huvishka, Begram mint (E.C1)
Copper coins were issued during the reign of Huvishka from the mint at Begram (E.C1) in three phases, exclusively as tetradrachms, initially of *c.* 16g, but soon reduced to *c.* 9–10g. The mint employed three different obverse designs and a range of gods, except in its third phase, when the king riding elephant and standing Oesho were the only designs used.
a) tetradrachm of first phase, showing the king seated on mountain top, with Oado reverse (E.C1-i: 1405 1922,0424.3616, 15.51g, 23mm)
b) tetradrachm of second phase on reduced weight standard, showing king seated on couch, with Mao reverse (E.C1-ii: 1483 1894,0506.1525, 8.56g, 21mm)
c) tetradrachm of third phase on reduced weight standard, showing king riding elephant, with Oesho reverse (E.C1-iii: 1497 1922,0424.2984, 9.93g, 26mm)

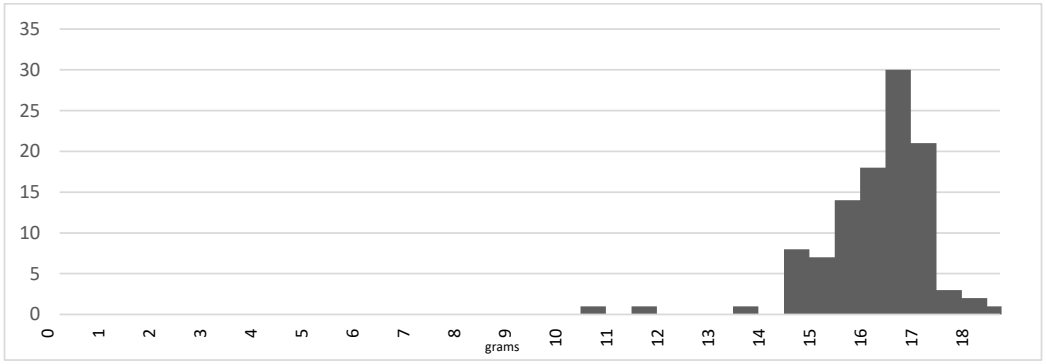
E.5 Huvishka I: copper coin design function and production system (Figs 3.40–3.44)

Four copper mints were in production during Huvishka's reign. They can be distinguished by their style, obverse and reverse types and distinguishing marks. Within each mint's production changing features enable them to be sequenced. The location of the three mints is based on the find spots of the various issues. The main copper mint's coins (E.C1) are found throughout Kushan territory, but are not mixed with coins of the other mints north of the Hindu Kush. Gandhara mint's coins (E.C2) are scarce at Begram and in Kashmir and India, and the Mathura mint's coins (E.C4) are not found outside India. It is presumed that this is caused by the main mint continuing to be located in Begram. The Kashmir mint's coins (E.C3) continue the series initiated under Kanishka I. The main mint and the Gandhara mint issues are also distinguished by the form of tamga used on them. The main mint used a tamga without a crossbar, whereas the Gandhara mint added a crossbar to the tamga. This use, to distinguish two distinct production centres, is at odds with the use on the gold coins, where the tamga distinguishes early from late coins at both mints. The first dies of the Mathura mint production use the main mint tamga, but then switch to the Gandhara mint tamga. Most coins of the Kashmir mint have a crude version of the main mint tamga with a triangular base.

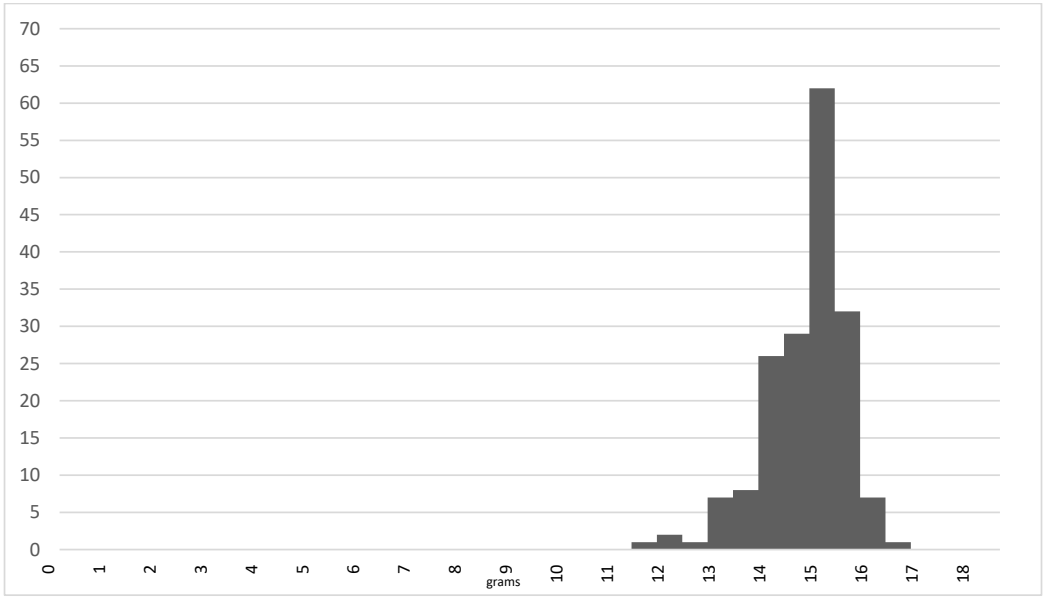
The use of three obverse designs: elephant-riding king, mountain-top king and king reclining on throne, on Huvishka's copper coinage might suggest that the mints were organised around three work stations. Die links in the third phase at the subsidiary mint in Gandhara (E.C2-iii) also suggest that the three work stations marked by the three obverse designs were located in a single establishment. The three obverse system is normal at the main copper mint until the third phase when the system appears to have changed as only the elephant-rider type was used. Although the



C.C1-i & ii 1u (Wima Kadphises)



D.C1-ii & iii 1u (Kanishka)



E.C1-i 1u (Huvishka)

Figure 3.41 Weight chart
Weight distributions for copper tetradachms minted at Begram under Wima Kadphises, Kanishka, and in the early reign of Huvishka, showing that the precision and target weight of minting had begun to shift before the devaluation

Figure 3.42 (facing page) Copper coinage of Huvishka, Gandhara mint (E.C2)
Copper coins were issued from a mint in Gandhara throughout the reign of Huvishka in five phases, exclusively as tetradrachms, initially of *c.* 17–16g, but reduced after the first phase to *c.* 12–10g. The mint employs a range of obverse designs as at the Begram mint (E.C1) but with a strong preference for the elephant rider. The range of divinities on the reverse initially included gods unattested from other mints such as Heracles, the eight-armed god and a bowman whose exact identity is unclear. The gods of the first two phases (a–b) were not identified by labels, but were accompanied by a Kharoshṭhi inscription *yodhavade*. Labels were used from the third phase (c–f), but in the fifth phase (g) Ardochsho and Athsho were both mislabelled as Mao.
a) tetradrachm of first phase with eight-armed deity reverse (E.C2-i: 1537 1991,0416.4, 17.11g, 26mm)
b) tetradrachm of second phase on reduced weight standard with bowman reverse (E.C2-ii: 1544 1922,0213.47, 8.62g, 25mm)
c–e) tetradrachms of third phase on reduced weight standard, showing king riding elephant with Pharro reverse, king on mountain with Ardochsho reverse and king on couch with Oado reverse (E.C2-iii: 1651 1988,0322.59 11.68g 25mm; 1490 1989,0104.6, 11.31g, 25mm; 1870 1988,0322.20, 10.05g, 24mm)
f) tetradrachm of fourth phase on reduced weight standard, with Ardochsho reverse. In this phase only the elephant obverse and Ardochsho reverse are used. (E.C2-iv: 1880 1988,0322.233, 11.99g, 23mm)
g) tetradrachm of fifth phase on reduced weight standard, with Ardochsho reverse mislabelled as Mao (E.C2-v: 2006 1989,0104.52, 11.98g, 24mm)

Figure 3.43 Copper coinage of Huvishka, Kashmir mint (E.C3)
Copper coins were issued in Kashmir at the beginning of Huvishka's reign. The coins issued use the types and designs as those issued in the reign but with an inscription naming Huvishka. The coinage seems to have ceased after a few years.
a) drachm with Kharoshthi control mark *su* and Mao reverse (E.C3-i: 2041 1989,0904.4017, 3.45g, 17mm)

elephant rider was the commonest obverse at the Gandhara mint, there are examples in the first two phases of the other two obverse designs. As at the main mint the elephant-rider type is the only one used in the fourth and fifth phases.

When the Mathura mint opened during the later phases at the main and Gandharan mints it used all three obverse designs of the other mints, but in a stylised form, with the mountain top and throne omitted from the appropriate designs. The Kashmir mint made no use of the three obverses, but retained the design used under Kanishka I, including the Kharoshthi control mark.

The progression through phases is largely marked by changing style, the reduction in weight standard and shifts in reverse design. At the main copper mint the weight standard and the quality of engraving both gradually declined through the first phase, from well-drawn figures with legible inscriptions to badly-drawn elongated narrow figures with blundered inscriptions; the weight standard also declined and late first phase coins often weigh as little as *c.* 13g. The main mint continued to use the six reverses (Nana, Miiro, Mao, Oado, Oesho and Athsho) found on the coins of Kanishka I's main mint. The same poor style of engraving continued after the fall in weight standard, but there are few coins of the elephant-rider type in the second phase and only reverse designs featuring Miiro and Mao are common, with a few rare coins with Oesho. This phase also saw a continuing deterioration of the weight standard. The third phase consisted entirely of the elephant-rider type with only Oesho reverses, but the weight became more stable, around 10g. Although poorly done, the dies of this phase were engraved in a consistent manner and the inscriptions are mostly legible, but written in a very angular script.

At the Gandhara mint a more complex arrangement is evident. The coinage began late in the period of heavier coins (only a handful of examples are known at full weight) and continued from the establishment of the lighter standard until the end of the reign. The first two phases are die-linked but span the drop in weight standard. They mostly feature the elephant-rider obverse with a handful of rare examples of the other two types. The elephant-rider type of this mint is distinguished from that of the main mint by showing the king holding a club. The reverse designs are not based on the issues of the main mint, but introduce new imagery featuring Nana, Ardochsho, Oesho, Oado, Pharro, a god holding bow and arrow and an eight-armed deity. The last two gods cannot be firmly identified as all these phase one and two issues depart from the practice of labelling images. In place of the label there is a word in Gandhari/Kharoshthi, normally *yodhavade*. This appears to be a name, probably the official responsible for the mint. A later coin issued in the third phase of the coinage shows an official worshipping the goddess Nana on the reverse. The official's name and his title are written in Bactrian ΟΜΟΙΑΓΟΓΑΝΟ ΚΑΡΑΛΡΑΓΓΟ (Omoiagogano, the Karalrang) (E.C2-ii, reverse 4i and 4j; Falk and Sims-Williams 2016, 136–7). It seems likely that Yodhavade also held the same office. These two names suggest that the Gandharan mint was under a local state official of high rank, as the use of the title Karalrang in the Surkh Kotal and Rabatak inscriptions suggest that this level of official answered directly to the king (Sims-Williams 2015, 259). One coin type, which from its style appears to be an imitation (E-imit.C3-iv), has a Kharoshthi inscription on its obverse, *vhriaga*[*di*]*m*[*o*]*jhakasa*, which could be another name of the same status.

The progression of the use of the nine different reverse designs at the Gandharan mint during its third phase follows a different pattern to that of the main mint. Apart from rare and occasional issues featuring Nana, Oesho and Athsho, the mint used first Mao and Miiro, then Oado and Heracles and finally Pharro and Ardochsho reverses. Sufficient die links have been observed in this phase to demonstrate this progression. Like the main mint the Gandhara mint's final phase consisted of an issue with only elephant-rider obverses and a single reverse design featuring the goddess Ardochsho. A similar focus on making Ardochsho the only god on the coins also seems to occur at the main gold mint towards the end of its final phase (E.G1-vi). This restriction of reverse dies seems to foreshadow developments during the remainder of the dynasty when two main designs, Oesho and bull, and enthroned Ardochsho, are the only designs commonly used.

The Mathura mint only commenced operation late in the reign using three obverse and three reverse designs: Mao, Miiro and Oesho. Its products only circulated commonly in the Mathura region and were found in excavations near the city (Härtel 1993, 314, nos 88–92).

The production levels at the Gandhara mint were probably not immense as the examples examined are often recorded in groups from the same obverse die. The large sample in the British Museum mostly came from a hoard, so are over-represented compared with the more numerous issues of the main mint. The Kashmir mint seems to have stopped production early in Huvishka's reign and the Mathura mint seems to have only started late in the reign. The locations of Huvishka's mints and their levels of production are also suggested by the ratio of Huvishka coins at various sites. The Masson finds from Begram in the British Museum and British Library contain 468 main mint coins, 17 Gandhara mint coins, 3 Mathura mint coins and 2 Kashmir mint coins (Errington 2021a, 170–7; Cribb 2021). The finds from Taxila (Khan 2009a) show 59 main mint coins, 11 Gandhara mint coins and 1 Mathura mint coin (none from the Kashmir mint). The listing of the Huvishka coins at Surkh Kotal (Fussman 1990) is not detailed enough

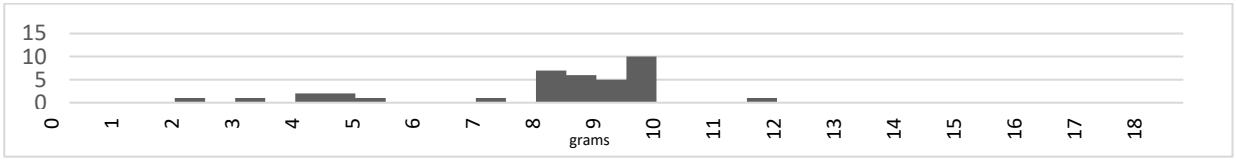
Figure 3.44 Copper coinage of Huvishka, Mathura mint (E.C4)
Copper coins were issued late in Huvishka's reign from a mint in the Mathura region in two phases in a single denomination, a reduced standard tetradrachm unit of *c.* 8–10g. The coins of the first phase (a) were a crude version of the style of the main mint (E.C1), while the second phase coins (b–d) had a distinctive style of their own. The coins employed versions of the three obverse designs known from other copper mints and a slightly more restricted range of the same divinities, focusing particularly on Mao and Miiro, the moon and sun gods.
a) tetradrachm of first phase with king seated on mountain obverse and Miiro reverse (E.C4-i: 2049 OR.8306, 7.19g, 22mm)
b–d) tetradrachms of second phase, featuring king riding elephant obverse with Miiro reverse, king seated on mountain top obverse with Mao reverse, and king reclining on couch with Miiro reverse. The distinctive style of this mint depicts the king with a large head and omits details like the mountains and couch, the type being indicated only by the position of the king's legs (E.C4-ii: 2063 1894,0506.1486, 8.49g, 23mm; 2070 OR.8292, 7.57g, 20mm; 2094 1848,0803.195, 7.70g, 21mm)

to give such ratios, but all the illustrated coins are from the main mint.

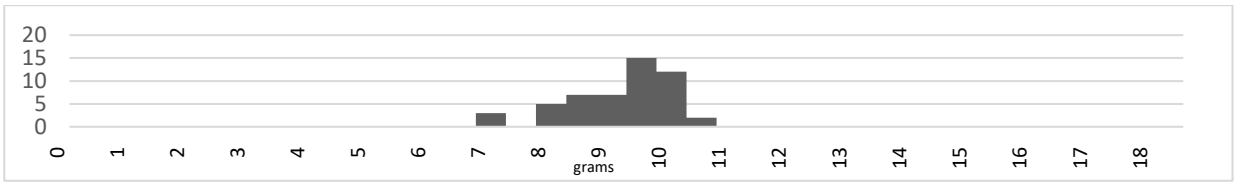
Cunningham (1892, 82, no. 58, pl. XVIII.15) published a square copper coin which he attributed to Huvishka and it was republished by Göbl (1984, type 985) with the same attribution, but it is not a coin of Huvishka. The design is derived from the seated king types of Maues (Senior 2001, type 15) and Azes II (*ibid.*, type 107). Cunningham described the obverse type as an elephant rider, but did not illustrate it. Cunningham almost read correctly the Gandhari/Kharoshthi inscription which says: *jayatasa … hastraṣkaśa*, but still attributed it to Huvishka. The presence of the title *jayata* suggests that a more likely attribution is to the group of Kshaharata rulers whose coins imitated late Indo-Greek and Indo-Parthian coin designs (Senior 2006, 22–3; Falk 2016).

E.6 Huvishka: the problem of imitations

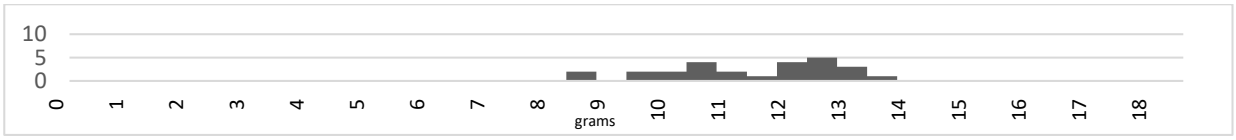
The crisis in the copper coinage which prompted the reduction in weight standard created a wider disorder in the monetary system. Alongside the underweight coins being produced by the main mint towards the end of its first phase and during its second phase there were many unofficial imitations of its products being made throughout Kushan territory. Whether the purpose was to create monetary units using less metal, thus making an initial profit in payments by count for the producer, or simply to supplement an inadequate local supply of official coin, is unclear. These unofficial copies can be distinguished from the official underweight coins by their poor style and garbled or absent inscriptions. That they are unofficial is indicated by the absence of any similarly poor coins associated with the known mints. In this catalogue these low-weight imitations of main mint types have been divided into three phases (E-imit.C1-i, -ii, -iii) on the basis of their weights, though they were probably issued from multiple unconnected centres. There are other categories of imitation which have different contexts and prototypes. Two categories (E-imit.C2-i, -ii) were made in India in imitation of the full-weight units



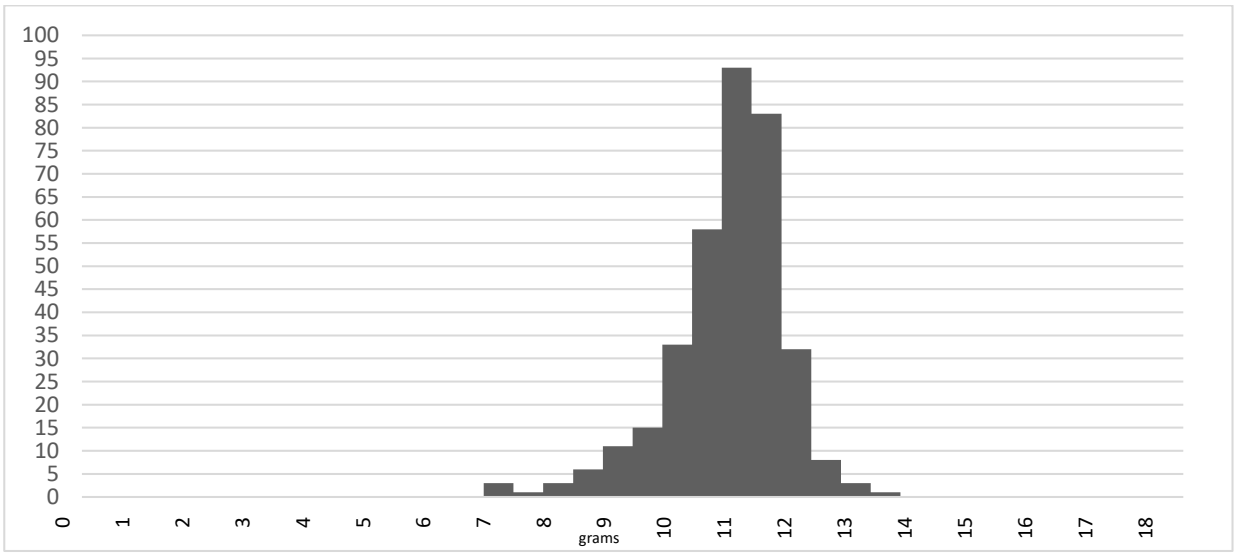
E.C1-ii 1u (Begram)



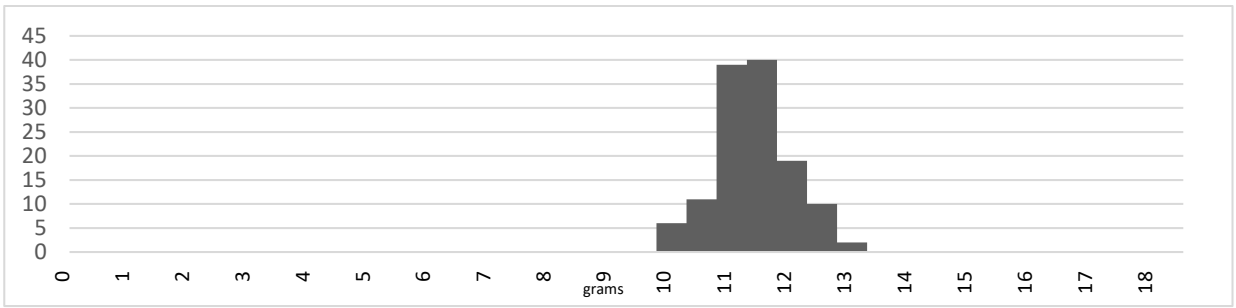
E.C1-iii 1u (Begram)



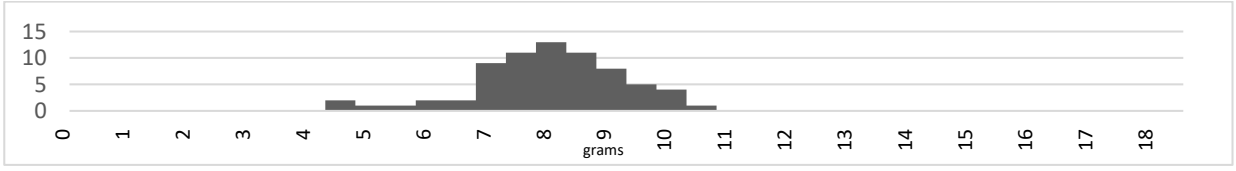
E.C2-ii 1u (Gandhara)



E.C2-iii 1u (Gandhara)



E.C2-iv 1u (Gandhara)



E.C4 (Mathura)

Figure 3.45 Weight chart
Weight distributions for copper coins minted at Begram, in Gandhara, and at Mathura, after the devaluation of Huvishka coinage showing the marked discrepancy in the application of the new weight standard between the centres

exported into India in the late 2nd century AD (see §D.7 above and Ch. 2 §D.1.1). The reduction in the weight standard likely drove these older heavier coins out of circulation and into the middle Ganges region where there was clearly a demand for coins (Jongeward and Cribb 2015, 91, 243–4; and see §E.7 below). This flow of coins was sufficiently dramatic that today Gangetic hoards of Wima Kadphises to early Huvishka copper significantly outnumber hoards found north and west of Mathura. If the main explosion of imitation was a response to local scarcities of coinage then this outflow would have exacerbated the situation. Most of the imitations made east of Mathura were of Kanishka types (D-imit.C1-i, -ii), but a few Huvishka examples have been recorded (Cribb 1985b; Mitchiner 1971), and can be divided into two phases by the style of copying, with or without inscriptions and tamgas.

In Gandhara a completely different series of imitations were made. The purpose of these imitations seems to have had a different purpose from the main mint imitations as they tend to follow the official weight standards or only fall to about 25% below it. The first Gandhara group (E-imit. C3-i), made during the period before the reduction of weight standard, copy designs of the main mint but in completely novel styles, and matching the official weight standard *c.* 17g, with some even exceeding it. The second series (E-imit.C3-ii) copy designs of the first phase of the Gandhara mint and stay close to the official weight standard, but the treatment of designs is poor and the inscriptions are blundered. The third and fourth series (E-imit.C3-iii, -iv) are similar to the official second series and match the reduced weight standard, *c.* 10g. The fourth series are distinguished by the presence of inscriptions in Kharoshthi. The fourth series may have a quasi-official status.

The fifth, sixth and seventh series of Gandhara imitations (E-imit.C3-v, -vi, -vii) are all based on the third phase of Gandhara mint issues. Although there are various reverse designs copied, all examples of the fifth series have a blundered version of the Oesho type inscription. The sixth and seventh series have blundered inscriptions which do not correspond to those of the fifth series. They are distinguished by the treatment of the original designs, but with different inscriptions. Series six are in a similar style to series five, while series seven adheres more closely to the original treatments of the official coins. The weights vary, sometimes dropping as low as 7g, but on average correspond with the official weight standard.

There is no evidence that the imitations of the main or the Gandharan mint continued in circulation after the reign of Huvishka. Imitations of coins of the Mathura and Kashmir mint have not been reported.

E.7 Huvishka: the legacy of the currency crisis (Figs 3.45–3.47)

The circulation of both official lower weight standard coins and of unofficial forgeries had a broader impact on the currency. Following Gresham's Law, the earlier heavier copper coins, including the copper coins of Wima Kadphises and Kanishka I, were undervalued if used by count and therefore removed from circulation in Kushan territory and were exported beyond the boundaries of the Kushan monetary system, particularly into northern India. The exported coins continued to circulate in the territories to which they had been shipped beyond the reign of Huvishka (see CSH for list of published hoards) and later gave rise to new types of imitation in northern and eastern India (see above, D-imit.C1-i, -ii; E-imit.C2-i, -ii). Alternative views on the presence of these coins in northern India persist in the literature (Prasad 2014), based on earlier analysis of the political context of these finds (Banerji 1951; Gupta 1953), but the evidence does not support these views (see Ch. 2 §D.1.1).

Huvishka's later copper coins only circulated into the early years of the next reign until the weight standard dropped again when they were also withdrawn as too heavy and therefore undervalued. It seems that many of these late Huvishka coins were recycled, after part of the coin was cut off to adjust them to the lower weight, so they could be restruck as Vasudeva I's 8.00g coins, as many examples have been seen with a section of the flan cut off (see F.C1-ii and -iii, e.g. nos 2265, 2295, 2317). The longer-term effect of the weight reduction under Huvishka on the Kushan coinage was also considerable, as it was seen as a legitimate and effective way of regulating the currency and had a lasting legacy as it was followed by regular reductions in weight of the copper coinage through the following century until the standard unit was below 2g by the end of the dynasty. The last half of Huvishka's reign marked the beginning of a decline in the currency which continued until the end of the dynasty, as the gold coinage had also gradually reduced to about SG (specific gravity) 18.5 (*c.* 96% gold) during his reign. The gold coinage of Huvishka, Kanishka I and Wima Kadphises continued to be used until the fineness dropped sufficiently in the reign of Kanishka II to about SG 17.5 (*c.* 90% gold) for it to be worthwhile withdrawing coins from circulation. Occasionally early Kushan gold coins have been found in later hoards, but it seems likely they are being hoarded for their gold content, perhaps as recycled jewellery, not as part of the currency system at the time of deposit.

E.8 Huvishka gold coinage: changes in fineness from Wima Kadphises to Huvishka (see Appendix 1)

It has been clear from a variety of analytic techniques over the last century that the general trend from the 2nd to the 4th century was for the fineness of gold coinage to diminish over time, from initially very pure gold (averaging SG 19.11, *c.* 99% gold) under Wima Kadphises to virtually gold-free issues at the end of the dynasty under Kipunadha. This general trend seems to have affected the whole north-west and, broadly speaking, different mints, even those answering to different powers, largely followed this trend through gradual debasement (Oddy and Cribb 1998; Bracey and Oddy 2010).

The fine-grain picture is harder to establish because different techniques of analysis, or even the same analysis performed with different equipment or methods, are usually not directly comparable. Fortunately the British Museum has records of several hundred coins whose specific gravity was measured using comparable techniques (Bracey and Oddy 2010). The first thing these confirm is most apparent in

Figure 3.46 Copper imitations of Huvishka's Begram mint issues (E-imit.C1)
Copper imitations of coins of the main mint of Huvishka (E.C1) were made after the crisis in the middle of the reign. Two main groups, in the northern part of the Kushan empire (a–c) and outside the empire in the Gangetic valley (d) are known. The northern imitations are normally underweight, some dropping as low as 1g. They can be divided into three phases by weight and by their increasing departure from the designs of the originals. The imitations from the Gangetic valley are close in weight to the official coins (E.C1-i) and can be divided into two phases, the first (not illustrated) retaining traces of inscriptions, and the second (d) resembling the fabric of the imitations of Kanishka (D-imit.C1) from the same region.
a) imitation of first phase, these usually weigh *c.* 6–9g, with king reclining on couch obverse and Miiro reverse (E-imit.C1-i: 2109 1847,1201.243, 7.49g, 20mm).
b) imitations of second phase, weighing *c.* 3–6g, with king riding elephant obverse and Mao reverse (E-imit.C1-ii: 2113 1850,0305.268, 3.88g, 20mm)
c) imitation of the third phase, weighing *c.* 1–3g, with king seated on mountain obverse and Miiro or Mao reverse (E-imit.C1-iii: 2143 1845,0613.138, 1.63g, 18mm)
d) imitation of second phase, with king riding elephant obverse and Miiro or Mao reverse (E-imit.C2-ii: 2151 1982,1117.61, 13.14g, 23mm)

Figure 3.47 (facing page) Copper imitations of Huvishka's Gandhara mint issues (E-imit.C3)
Copper imitations of coins from Huvishka's main (E.C1) and Gandharan mints (E.C2) were made and circulated in the Gandhara region. Unlike the other imitations of the main mint (E-imit.C1) these were often of good weight or only slightly below the official standard and seem to have begun early in the reign. The first two phases (a–b) copied and retained the weight standard of Huvishka's heavy coins issued before the mid-reign crisis. Subsequent phases (c–f) had reduced weight standards based on the reduced weight of official coins. These phases can be distinguished on the basis of small changes in design.
a) imitation of first phase, copying designs from the main mint (E.C1-i) (E-imit.C3-i: 2155 1991.0416.18, 16.21g, 25mm)
b) imitation of second phase, copying designs of the *yodhavade* series of the Gandharan mint (E.C2-i) (E-imit.C3-ii: 2167 1922,0424.3617, 13.84g, 24mm)
c) imitations of third phase, based on *yodhavade* series but of reduced weight (E-imit.C3-iii: 2171 1956,0409.172, 10.02g, 24mm)
d-f) imitations of fifth to seventh phases, these phases are distinguished by details of design and weight (E-imit.C3-v to vii: 2172 1989,0104.71, 10.50g, 24mm; 2175 1894,0506.1485, 11.09g, 25mm; 2184 1922,0424.3620, 8.78g, 25mm)

Figure 3.48 Gold and copper coinage of Vasudeva I (F.G1 and F.C1)
Gold and copper coinage was issued in the reign Vasudeva I, gold dinars and quarters and copper reduced-standard tetradrachm units. The copper coins are often not round, but appear to have been made from heavier coins of Huvishka or Vasudeva's first phase (F.C1-i) with a section cut off to reduce the weight. All his coins issued show the king wearing heavy armour. The cuirass and skirt appear to be a form of plate mail and the coverings of arms and legs are formed of overlapping rings. The reverses normally show the god Oesho with his attendant bull.
a) gold dinar of Vasudeva I's main gold mint (F.G1-i: 2201 1894,0506.92, 8.06g, 19mm)
b) copper unit of Vasudeva I's copper mint with D-shaped flan caused by the recycling of an older coin with a section removed (F.C1-ii: 2321 1889,0105.1166, 8.23g, 21mm)

the period from Wima Kadphises to Huvishka, that the mints were remarkably precise in their control of fineness of the coins, just as they were in controlling the weight (Bracey 2009, table 2). In most cases the variation in test results on Kushan coins is very close to the margin of error for that technique.

The first coins for which a significant number of tests are available are Wima Kadphises' fourth and fifth phases, the first productions of significant size. And these early coinages show an immediate reduction in fineness. In Wima's reign the fineness drops from SG 19.11 to 19.04 (*c.* 98.8% to 98.4% gold). Too few of Kanishka's early Greek inscription coins have been tested to know how fine they were, but by the second phase of his reign the gold content had dropped again (SG 18.97, *c.* 98% gold) and seems to have held steady to the end of his reign, before dropping again by the second phase of Huvishka's coinage (SG 18.67, *c.* 96.5% gold). Or at least that is the picture at the main mint. When the subsidiary mint opens late in the reign of Kanishka I it seems to aim at a standard close to that of Wima Kadphises' final issues (SG 19.07, *c.* 98.6% gold).

Unfortunately for the reign of Huvishka there are relatively few robust comparable tests so it is not possible to say whether the two mints synchronised or remained slightly different in their purity, or whether the crisis in the middle of the reign impacted the purity of the coins. As we shall see in subsequent sections small differences between mints were not unusual and likely reflected differences in technical procedure (and possibly local avarice) rather than state decisions.

F.1 Vasudeva I, sixth Kushan ruler, c. AD 190–230: consolidation of the system (Figs 3.48–3.52)

The denomination system which had emerged by the end of Huvishka's reign continued into Vasudeva I's reign. The only denominations being issued at the main and subsidiary gold and copper mints were gold dinars and quarters and copper units. The copper weight standard was reduced from *c.* 10.00g to *c.* 8.00g a few years into the reign.

All the coins used a version of the design introduced under Kanishka I: a standing king making an offering at a small altar on the obverse and a deity on the reverse. The coins were easily and probably intentionally distinguished from Kanishka I's by the change of the king's costume, as Vasudeva I was shown in armour. As had been observed in the final stages of the previous reign, there was also a general reduction in the number of reverse types used. For the first issue at the main gold mint only two deities, Vasudeva and Nana, were used, but by the second issue only one deity, Oesho, was depicted, the same as the one used at the subsidiary gold mint. Although only this god was used there were a variety of iconographies introduced through the reign, but they became standardised by the end of the reign. For the copper coinage, only Oesho with a single iconographic version was employed on the reverse. Most of the copper coinage of this reign appears to have been produced at a single copper mint, successor to the main copper mint of the previous reigns. However not enough good condition copper coins of the usual type have been reported to enable a thorough analysis, so a subsidiary copper mint may be detected in the future.

Figure 3.49 Gold coinage of Vasudeva I, Balkh mint (F.G1)
Gold coins were issued throughout the reign of Vasudeva I from the Balkh mint in four phases, primarily as dinars of *c.* 8g, but with occasional issues of quarter dinars. With the exception of the first phase, all phases use a reverse depicting Oesho and bull. The phases are distinguished by the addition of design elements on the obverse and changes in the representation of gods on the reverse.
a–b) dinar of first phase with Nana reverse and quarter dinar with Oesho reverse (F.G1-i: 2194 1879,0501.86, 7.93g, 20mm; 2198 1890,0502.3, 1.92g, 12mm)
c) dinar of second phase with Oesho and bull reverse, showing Oesho with three heads (F.G1-ii: 2201 1894,0506.92, 8.06g, 19mm)
d–e) dinar and quarter of third phase, with single-headed Oesho and bull on the reverse, the phase is distinguished by a trident over the altar on the obverse (F.G1-iii: 2207 1879,0501.88, 8.1g, 20mm; 2201 IOC.359, 2.02g, 13mm)
f) dinar of fourth phase, with Oesho with flaming halo and bull on the reverse, the phase is distinguished by a nandipada symbol added in the right field (F.G1-iv: 2211 1982,0625.3, 7.92g, 21mm)

A rare series of copper coins has been recorded which falls outside the main series (F.C2-i). These coins have the same designs as the coins of the main mint, but share some features with the copper quarter units made in Kashmir during the reigns of Kanishka I and Huvishka, although they were struck to a slightly higher standard at *c.* 5g, so appear to be half units. Their reported sources suggest that they were current in India, but not in Pakistan or Afghanistan, so they may be issued in Mathura, but there is no firm evidence. Their designs, without a trident on the obverse, position them as contemporary with the first phase at the main copper mint. A so-far unique copper piece weighing 80.01g has also been recorded (F.C-misc). Stylistically it appears to have been designed by the die engraver at the subsidiary gold mint in Peshawar during the coinage's second phase. Its weight is ten times that of the copper unit, but it is not clear whether this coin was made for circulation as a multiple copper denomination or is more likely a trial striking for a 20-dinar gold coin (i.e. if struck in gold it would weigh about 160g).

The inscription formula introduced by Kanishka I continued to be used for Vasudeva I's coins. The obverses are inscribed ÞAONANOÞAO BAZOΔEO (or BAZΔEO) KOÞANO, and there are examples of abbreviated versions of

Figure 3.50 Gold coinage of Vasudeva I, subsidiary gold mint, Taxila or Peshawar (F.G2)
Gold dinars and occasional quarter dinars were issued under Vasudeva I at the subsidiary gold mint in four phases. As at the main gold mint the phases were distinguished by changes in obverse and reverse design details.
a) dinar of first phase with Oesho reverse, no bull is depicted with Oesho (F.G2-i: 2220 1860,1220.196, 7.92g, 19mm)
b) dinar of second phase with Oesho and bull reverse, this reverse became standard for the rest of the reign (F.G2-ii: 2222 1879,0501.93, 8.04g, 21mm)
c–d) dinar and quarter dinar of third phase, both depict a trident over altar on the obverse, which distinguishes this phase from the previous one (G.G2-iii: 2226 1893,0642.1, 7.93g, 20mm; 2228 1894,0506.105, 1.73g, 12mm)
e) dinar of fourth phase with control marks, Greek A and Brahmi *ha* in right field on obverse, Brahmi *ha* in right field on the reverse. The addition of control marks distinguishes this phase. A halo of flames is depicted around Oesho's head on the reverse, which becomes the normal depiction in this phase. (F.G2-iv: 2234 1993,0642.2, 8.03g, 21mm)

the inscription omitting the dynastic title. The Mathura copper half units are inscribed ÞAO BAZOΔEO, the short form used on Kanishka's copper coins.

By the end of the reign the early heavier copper coins had been removed from circulation and probably recycled by the mint to make the lighter coins, as many examples of the lighter issues appear to have been made from a blank the size of the earlier coinage but with a piece cut off to reduce their weight (F.C1-ii and -iii, e.g. nos 2264, 2294, 2316). The lighter standard copper coins continued in circulation until the reign of Vasishka. The gold coinage, however, was largely out of the general currency by the reign of Vasishka because its gold content was too high (an effect of Gresham's Law: 'bad money drives out good', i.e. coins containing more metal value than the current issues tend to be removed from circulation as undervalued and melted or exported as they are worth more than current coins; see Ch. 2 §D.1.1).

The uniform designs established through Vasudeva I's reign, a standing king on the obverse and a single deity on the reverse (either Oesho standing with bull or, after Vasudeva I,

Figure 3.51 Copper coinage of Vasudeva I, Begram mint (F.C1)
Copper coins were issued under Vasudeva I at the Begram mint in three phases, distinguished in the same way as the gold coinage by small changes to the designs. The first phase (a) retained the *c.* 10g weight standard of the end of Huvishka's reign, then the second and third phases (b–c) were struck on a reduced 8g standard. The basic design of standing king and Oesho with bull is the same as that used on almost all of coinage in the name of Vasudeva and influenced all subsequent copper coinage in the region.
a) unit of the first phase, with small design elements around the king's trident distinguishing types in this phase, in this case a single pennant can be seen (F.C1-i: 2258 1982,1109.1, 10.09g, 25mm)
b) unit of the second phase, a trident over altar on the obverse distinguishes this phase from the previous phase (F.C1-ii: 2266 OR.6943, 10.07g, 24mm)
c) unit of the third phase, distinguished by the addition of a nandipada (or a tamga) in the right field below the king's arm (F.C1-iii: 2321 1889,0105.1166, 8.23g, 21mm)

Ardochsho enthroned), became normal for the rest of the dynasty, with very few modifications, mostly resulting from the gradual disappearance of Bactrian inscriptions, and the growing use of Brahmi inscriptions in the obverse field. It also became the model for the new coinages issued by the Sasanians and later the Kidarite Huns when they invaded Kushan territory. The same design formula continued to have an impact in India after the Kushans and their successors had disappeared (Cribb 2003, 8).

F.2 Vasudeva I: coin design function and production system

The gold coinage of this reign went through three major changes, distinguished by details on the obverse at both mints: phases one and two at both mints lacked the trident and symbols of the later phases. In the third phase a trident above the altar was added to the design and in the fourth phase a nandipada symbol or Brahmi control mark were added in the right field. Similar changes in the detail of the design are discernible in the copper coinage: no trident for the first phase, added trident for the second phase and a nandipada (or tamga) symbol for the third.

The gold mints are distinguished by their different styles and their different iconographies for Oesho; they can also be distinguished by a feature of the king's armour, as at the main mint he is shown wearing a banner attached to his back and rising behind his head, which is absent at the subsidiary mint.

The main gold mint began its issues with reverses featuring Nana (F.G1-i, reverse 2a) and the Indian god Vasudeva Krishna (F.G1-i, reverse 1a), but then introduced various treatments of Oesho. From the start of the second

Figure 3.52 Copper coinage of Vasudeva I, Mathura mint (F.C2)
Copper coins were issued early in Vasudeva I's reign at a mint in the Mathura region in a single phase as half units of *c.* 5g. The design is the same standing king on the obverse and Oesho with bull on the reverse as the Begram mint's issues (F.C1) but in a distinctive engraving style. a) half unit of the first phase (F.C2-i: 2352 1983,0119.1, 4.61g, 16mm)

phase (F.G1-ii) a new artist created a stable representation of the king which continued through until the end of the reign only distinguished in the next phase (F.G1-iii) by the addition of a trident above the altar. The fourth phase added a nandipada to the right field on the obverse (F.G1-iv). The representation of Oesho also settled into a consistent treatment during the second phase, with the addition of a halo of flames around his head in the fourth phase. Quarter units are known corresponding with the first, second, and third phases of the main mint. Göbl noted two examples (1984, type 641A) with nandipada in the right field and it would be reasonable to expect quarters to have been made in the fourth phase. However, the two examples known with nandipada stylistically more closely resemble the next phase which involved the transition to Kushanshah control of the mint.

The subsidiary mint began its issues with crude copies of the coins of the main mint (F.G2-i) or poor interpretations of the centrally supplied design, often with mistakes in the Bactrian inscription. A curious re-use of a reverse die from the previous reign meant that a quarter dinar with Huvishka's last Mao reverse began the issue of this denomination at the beginning of the reign (F.G2-i, 1/4d), but it was soon replaced with Oesho designs conforming with the dinar denomination. Towards the end of the second phase (F.G2-ii) a more competent die engraver was used, but still copying the main mint's designs until he introduced a new iconography for Oesho with four arms excellently engraved (F.G2-ii 1D/3a). The third phase (F.G2-iii) saw the introduction of a trident into the obverse design and the work of the same skilled engraver continued. To a modern eye the dies for these coins are amongst the most beautiful in the Kushan gold series, and there is no doubting that the individual responsible was amongst the most technically competent the mints employed. The wide range in technical competence amongst engravers is likely a result of a very modest level of production. With the exception of the main copper mint at Begram (the scale of which is still unclear) none of the mints would have provided enough work to keep even a single engraver permanently employed, so there was no opportunity for a 'school' of workmen to develop. Oesho was depicted in various forms, including the elegant dancing Oesho (F.G2-iii, reverse 2a), until the last coins of the phase introduced a new design showing Oesho with a flaming halo based on the main mint's fourth phase coins. The subsidiary mint's fourth phase (F.G2-iv) commenced by adding the nandipada symbol to the last die of phase three, then, in place of the nandipada, Brahmi control letters were added to the dies, initially on the obverse, then also on the reverse where the same flaming halo design was continued. The sequences of the changes at both mints can be demonstrated through die links and through dies re-engraved to continue in use into the next phase.

The rationale for the phases is not explicit, but the introduction of the trident may coincide with the reduction of the weight standard of the copper coins from *c.* 10 to 9g. A similar drop in copper coin weights to *c.* 8g may also be the reason for the introduction of the nandipada symbol or Brahmi/Kharoshthi/Greek letters in the gold coinage. It is worth noting that there are several curious changes in the fineness of the gold. As the reign begins the gold content had fallen fractionally, to SG 18.68 (*c.* 96.5% gold) in the first phase of the main mint (though the sample is mostly from quarters), and to SG 18.57 (*c.* 95.5% gold) in the second phase of the subsidiary mint. Both of these are marginally lower than the last comparable figures for Huvishka's reign (E.G1-ii and E.G2-iv) and mark a downward trend at the main mint with the gold reaching SG 18.58 (*c.* 95.5% gold) (almost identical to the averages from the subsidiary mint's second phase). However in the later phases there is a notable reversal. The main mint rises to SG 18.67 (*c.* 96.5% gold) in its third phase and in the transitional phase five when the Sasanians take control of the mint the average SG is 18.72 (96.7% gold), which seems to be higher than it had been since the early reign of Huvishka. The subsidiary mint's return is even more pronounced, reaching SG 18.9 (*c.* 97.7% gold) and SG 18.86 (*c.* 97.4% gold) in its third and fourth phases, comparable with the final phases of Kanishka I's coinage.

Changes in fineness are not simply a matter of purity. There may also be changes in precision. Under Huvishka, and in the early reign of Vasudeva, the spread of results (as indicated by standard deviations from 0.14 to 0.24 in the specific gravity measurement) are much larger than they were under Wima Kadphises (0.04 to 0.07) or at the end of Vasudeva's reign at the subsidiary mint (0.05 to 0.08), though this must be treated with caution as samples are always small. The reasons for this attempt to reassert the quality of the gold are unclear but it did not last; under Kanishka II the former subsidiary mint's standard (G.G1-i) collapsed almost immediately to SG 17.38 (*c.* 88% gold) (see §G.2 below).

Die links show the marks changing in the following sequence of combinations: Brahmi *pri* and Greek A; replaced by Brahmi *pri*, Kharoshthi *pri* and Greek A; then Brahmi *ha* and Greek A; then Brahmi *ha* and Greek B. The meaning of the marks is not clear, but it seems to represent a control system similar to the use of different reverse deities in the reigns of Kanishka I and Huvishka. The marks are not related to the reign as the combination Brahmi *ha* and Greek B appears on the first coins of this mint in the next reign under Kanishka II. After this combination there are further related combinations in the sequence Brahmi *bhi* and *ha*, Brahmi *vi* and *ha*, which suggests that the marks Greek B and Brahmi *bhi* and *vi* might all be attempts to indicate the same word, perhaps the name of an official, either with authority over the mint (like Yodhavade and the Karalrang Omoiagogano referred to in coin inscriptions under Huvishka) or employed at a lower level in the mint. At this

stage there is no indication that any of the marks represent 'mint marks' as all the coins were made at the same mint and the different control marks are all linked through the succession of dies indicated by die links. The control marks can, however, be used to link together issues as products of the same mint in some cases. The system of using control marks instigated at the subsidiary mint in this reign continues through until the end of the Kushan period and was also adopted at the mints of the Kushano-Sasanians and Kidarite Huns.

As in previous reigns the main mint appears to be continuing the use of two work stations in the same establishment and the subsidiary mint just one, but the record of dies for the reign is not as complete as for earlier reigns, so this conclusion is provisional. The less complete sample of dies is probably a function of collecting practice. The number of recorded dies used during the *c.* 35 years of this reign suggests that production was slightly lower than in the reign of Huvishka but not significantly.

The copper coinage follows a similar pattern to that of the gold coinage. The first phase lacks the trident over altar and nandipada (F.C1-i), the second phase adds the trident (F.C1-ii) and the third the nandipada, or another symbol (F.C1-iii). There is no evidence, so far discerned, of there being two copper mints, but it is possible. The various modifications of design in the second phase, bar on the trident (F.C1-ii, obverse 3A) or semicircle of dots on the sceptre (F.C1-ii, obverse 4A), may be mint indicators. More hoards may help establish if there were multiple mints and if so what characteristics distinguish them. A small issue of coins, which are half the standard weight, either half units or a different denomination system, seem to be the products of a small temporary mint, perhaps located in Mathura (F.C2-i).

F.3 Vasudeva I: Kushano-Sasanian imitations (Figs 3.53–3.57)

Many of the surviving coins associated in the literature with the Kushan king Vasudeva I are not his issues, but imitations of his coinage by the Sasanian administration which took control of the northern part of Kushan territory at the end of his reign. Modern scholars refer to this state as Kushano-Sasanian; its rulers adopted the title Kushanshah. The process of imitation took place during and after the reign of Kanishka II. The gold coins copy both Vasudeva I's and Kanishka II's coins and the copper imitations combine the obverse of Kanishka II's coins with the reverse of Vasudeva I's. In the literature they are normally referred to as 'Vasudeva imitations'.

The transition from official Kushan to Kushano-Sasanian took place at the main mint when the Sasanians captured Balkh, but the precise point of change in administration is not completely clear. The first gold coins of the Balkh mint acknowledging a Kushano-Sasanian Kushanshah occur in the third reign of Sasanian rule, when the name of Vasudeva was replaced by that of Peroz I, Bactrian ΠΙΡΩΖΟ ΟΟΖΟΡΚΟ ΚΟΡΑΝΟ ÞΑΥΟ (Peroz great Kushan king) (T.G1-i). There were two Sasanian Kushanshahs before Peroz: the first, whose name appears to be Ardashir, son of Ardashir, wearing a bird-headed fish crown on his coins (R.C1-i), and the second also named Ardashir, with a tripartite crenellated or floriate crown (S. G1-i, S.C1-i, S.C2-i and -ii) (or perhaps the same king with a new crown). The coins of Peroz I have various control marks: nandipada, triple dots, single dot and swastika. The nandipada originated with the final phase at both of Vasudeva I's gold mints. At the subsidiary mint it was immediately replaced with Brahmi, Kharoshthi and Greek control marks and the transition point at this mint from Vasudeva I to Kanishka II is very apparent through the sequence of these marks. If the pace of production at both of Vasudeva I's mints was consistent, then it seems likely that the addition of the three dots, single dot and swastika control marks to coins in the name of Vasudeva I took place at or after the end of his reign. Three dots and single dots appear during the phase listed here as phase v (F.G1-v) of Vasudeva I. The introduction of these marks is also characterised by a gradual deterioration of the design and the broadening and thinning of the flan (the weight remains consistent).

The next phase of imitation coins in the name of Vasudeva I introduced the swastika mark on the reverse (F-imit.G1-ii) then on the obverse (F-imit.G1-iii), together with other changed design features: the rearrangement of the ribbons tied to the trident on the obverse, so that they fall either side rather than to the left of the trident staff, and the placing of a crescent on the forehead of Oesho on the reverse. There is also an increase in the number of dot control marks including a rosette of dots on most obverse dies. Some of these new features (swastika on reverse) also appear on a series of coins with a corrupt version of the name of Kanishka II (F-imit.G1-i). This set of coins, entitled Xodēšāh coins by Göbl (1984, 55, types 662–4), have a corrupt version [Þ]AONANO Þ[A]O – KOAHÞAO XOÞAN[O] of the inscription ÞAONANO ÞAO KANHÞKO KOÞANO used on Kanishka II's Wesho and Nana reverse types (G.G2-i and G.G4-i) (Cribb 1990, 155, 191). At the start of the group is a type (F-imit.G1-i obverse 1A/reverse 2d) which has the name Kanishka written more clearly, but with one letter missing, KANHÞO, and the rest of the inscription blundered. This coin also has a Brahmi control mark *la* in the lower right field, a feature not appearing on the other

Table 3.8 Ray Dheri hoard parcel

Metal	Ruler	Type	Khan and Durrani 2018, 169–70	No. of examples
Gold	Vasudeva I	F.G1-iv	no. 1	1
		F.G1-v	nos 2–12	12
	Kanishka II	F-imit.G1-i	no. 14	1
Copper	Vasudeva I	F.C1-iii, illegible	no. 15	1
	Kanishka II	G.C1-i	nos 16–28	13

Figure 3.54 Kushano-Sasanian copper coinage based on the copper coinages of Vasudeva I and Kanishka II (F-imit.C1)
Copper coinage was issued by the Kushano-Sasanians in imitation of Kushan issues from the period of Kanishka II through to the 4th century, copying Kanishka II's king in overcoat obverse and Vasudeva I's Oesho and bull reverse. In this catalogue the main group of imitations (F-imit.C1) are divided into three phases (a–c), distinguished by their use of control marks and by their deteriorating representations and weight.
a) unit of first phase with swastika under king's arm (F-imit.C1-i: 2362 1844,0921.26, 6.56g, 21mm)
b) unit of second phase with triangular control mark under king's arm (F-imit.C1-ii: 2406 1959,1001.5, 4.59g, 18mm)
c) unit of third phase with trace of triangular mark under king's arm (F-imit.C1-iii: 2450 1992,0119.567, 3.4g, 15mm)

coins of this series, but featured on some of Kanishka II's main mint gold coins (G.G1-i).

A hoard discovered in Pakistan gives a small indication of the relationship between the late Vasudeva I coins with dots and the transition from Vasudeva I to Kushano-Sasanian imitations. The hoard was found at Ray Dheri near the site of Charsadda in Gandhara and part of it is published (Khan and Durrani 2018). The surviving part consists of 14 gold and 14 copper coins (**Table 3.8**).

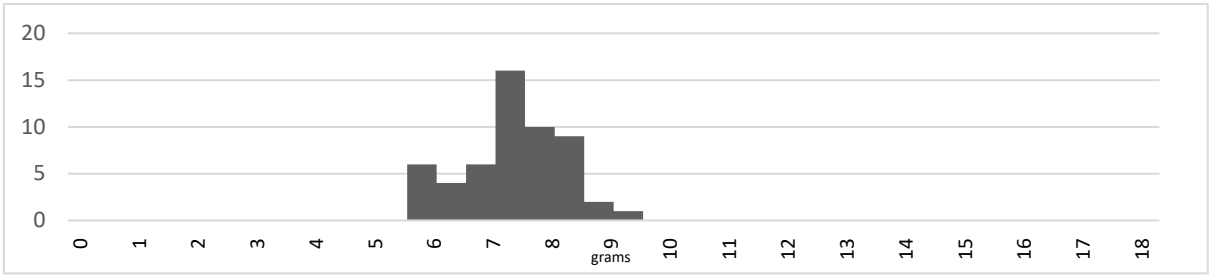
If the surviving coins are typical of the hoard then it suggests that the gold and copper coins are contemporary, so it points to the dotted Vasudeva I series being issued during the reign of Kanishka II and therefore posthumously.

A third stage in the Vasudeva I imitation sequence is marked by the addition of a delta/triangular mark in the left field of the obverse (F-imit.G1-iv). The triangular mark has a foot-shaped extension below and could represent an attempt to write *er* in Brahmi (Cribb 1990, 155, 191). By this stage the Bactrian inscription has become blundered to take the form ÞOONO BO-OOÞOKOBOIO (with the second Þ reversed and K missing its lower right stroke). The combination of control marks (three dots below king's left arm, swastika surmounted by dot between his legs, dot between his right leg and altar, letter or similar mark below left hem of king's skirt) on the final issues of this phase of imitations is repeated on the first issue in the name of Peroz I.

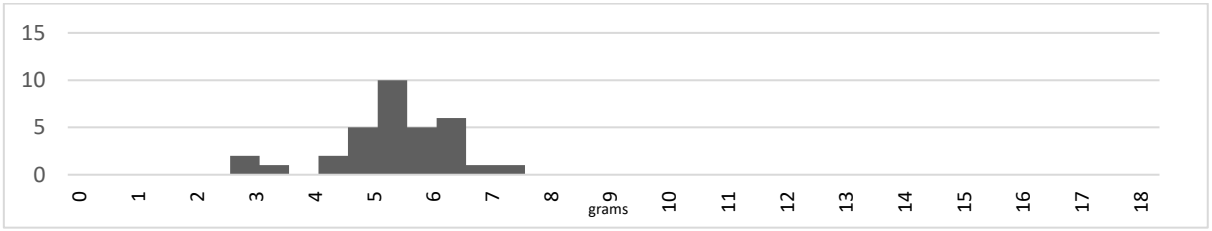
The imitation series shows a gradual decline in gold quality, so that by the time of Peroz I's issues the gold content has dropped to about SG 15.8 (*c.* 76% gold).

Alongside the imitation gold series there is also a very extensive series of copper imitations which initially match the gold imitations, but then continue into gradual

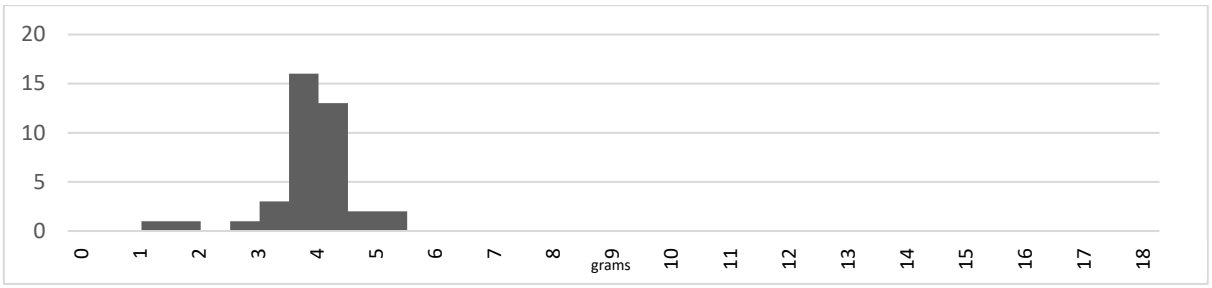
Figure 3.53 (facing page) Kushano-Sasanian gold coinage in the name of Vasudeva I and Kanishka II, Balkh mint (F.G1-v to F-imit.G1-iv)
Gold dinars, and a few quarter dinars, were issued from the gold mint at Balkh through the transition from Kushan to Kushano-Sasanian rule. They were issued in the names of Vasudeva I or Kanishka II, using the Kushan dinar standard of *c.* 8g, and can be divided into five phases. The coins were issued between the end of the reign of the Kushan king Vasudeva I (*c.* AD 230) and the start of the reign of the Kushanshah Piruz I (c. AD 245) and the distinctions between phases were small, all coins employing the same design of standing king on the obverse and Oesho on the reverse. The changes on which phases can be distinguished are a series of minor alterations in the design and a gradual broadening (from *c.* 22/23 to 27/28 mm) and curving of the flan. The first changes, dots applied as control marks, characterised the last phase of Vasudeva I dinars (a–b) which was transitional to Kushano-Sasanian issues. The coins of the next phase (F-imit.G1-i) are clearly imitations as they were distinguished by the replacement of Vasudeva I's inscription by a blundered version of that of Kanishka II (c), the addition of more dots and a change in the ribbons on the trident, and on the reverse the addition of a crescent to Oesho's brow and a swastika below the bull's head. The next phase (F-imit.G1-ii) reinstated the inscription of Vasudeva II, and subsequent phases (F-imit.G1-iii, F-imit.G1-iv) are indicated by the addition of swastika and triangular control marks.
a–b) dinars of the transitional phase from Vasudeva I to Kushano-Sasanian rule, showing dots on reverse (a) and on both obverse and reverse (b) (F.G1-v: 2213 1894,0506.106, 7.97g, 22mm; 2218 1979,0215.1, 7.99g, 23mm)
c) dinar of the first phase of imitations, distinguished by a corrupt version of the inscription of Kanishka II, a variety of additional small marks appear, such as on this example with a rosette of dots on the obverse and a crescent on Oesho's brow on the reverse (F-imit.G1-i: 2236 1860,1220.210, 7.66g, 23mm)
d–e) dinar and quarter dinar of the second phase of imitations, the inscription is once more in the name of Vasudeva I and uses dot control marks, note the set of three dots in the right field on these examples, but this phase is distinguished from the transitional types by the head of Oesho with crescent breaking the dotted border, a feature that becomes more marked over the period of imitations (F-imit.G1-ii: 2242 1845,0613.84, 7.82g, 24mm; 2245 1888,1208.560, 1.97g, 15mm)
f) dinar of the third phase of imitations, distinguished by a swastika on the obverse between the king's legs (F-imit. G1-iii, 2247: 1906,1103.2366, 7.96g, 25mm)
g) dinar of fourth phase of imitations, distinguished by a triangular control mark in the left field (F-imit.G1-iv: 2252 IOC.583, 8.06g, 27mm, 8.06g, 27mm)



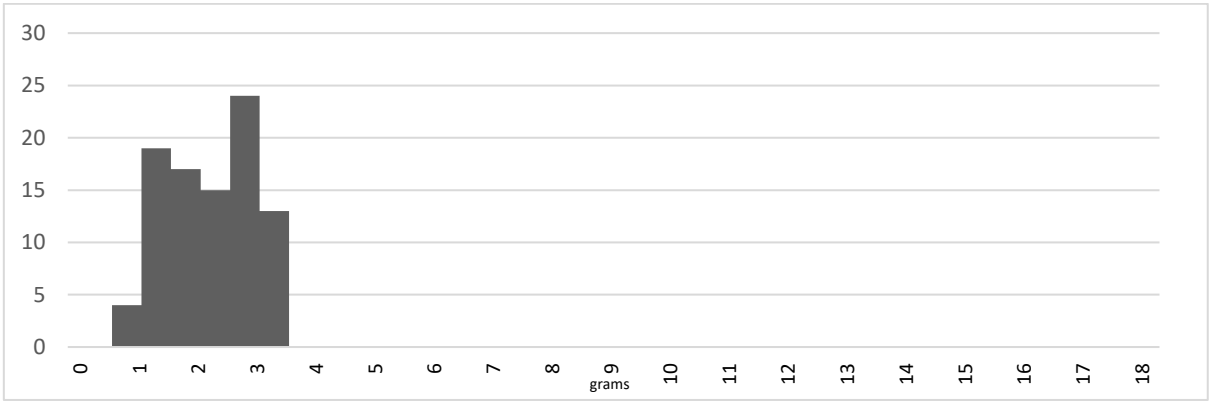
F.C1-iii 1u (final copper issues of Vasudeva I)



F-imit.C1-i 1u (earliest imitations)



F-imit.C1-ii 1u (phase 2 imitations)



F-imit.C1-iii 1u (phase 3 imitations)

Figure 3.55 Weight chart
Histograms of catalogue data for imitations of Vasudeva I illustrating the falling weight standard. The lack of a precise standard in the final phase, apparent in other unpictured centres as well, is a function of less care from the mints, greater wear on surviving examples and difficulties in attribution in the current classification

degeneration of both design and weight. The copper imitations seem to start with an issue (F-imit.C1-i) weighing about 6g, issued probably towards the end of the period of gold imitations with a swastika (F-imit.G1-i, -ii, -iii), as the first issue are marked with a swastika. Soon after, within the same phase, coins with a triangular device under the king's left arm are also issued, which correspond with gold imitations with the same device (F-imit.G1-iv). Unlike the gold imitations these copper issues show the king wearing an overcoat instead of the armour as on the gold. This overcoat design was copied from the obverse of the copper coins of Kanishka II, while the Oesho and bull was based on the reverse of Vasudeva I's coins. The triangular device coins go on into a second phase (F-imit.C1-ii) with a more stylised rendering of the overcoat, covering it with dots and with long tapered hem. The production of the second phase seems to have begun before the second phase of copper coins issued south of the Hindu Kush by the third Kushano-Sasanian king Peroz I as an example of that phase (T.C2-ii, 1A/1a) is overstruck on a second phase imitation. It seems likely that these copper imitations (T.C2-i and -ii) and the gold coins they relate to were issued by the Kushano-

Figure 3.56 Imitation copper coinage based on the Kushano-Sasanian imitations (F-imit.C2–C5)
Copper coinage similar to the Kushanshah imitations was in circulation throughout the 3rd and 4th century in a variety of styles. In this catalogue it is divided into four mints, and the first two, which are the largest and possibly official issues, into two and three phases respectively. The first group (a) is distinguished by the stylised designs, particularly the exaggerated points of the dotted overcoat which often resembles a cross on the king's chest. The second group (b–c) has similar designs to the first group but in much cruder style. The third group (d–f) is distinguished by the reduction of the reverse design to a series of vertical lines and initially weighed about 4–5g with some lighter coins issued in a second phase. The fourth (g) and fifth (h) groups are distinguished stylistically, but probably represent multiple local productions, the relationship between which remains unclear in the absence of good archaeological data.
a) example of first phase of the second group, which an overstruck example (T.C2-ii, no. 3884) suggests are contemporary with early Kushano-Sasanian ruler Peroz I (F-imit.C2-i: 2528 1865,0803.84, 5.66g, 19mm)
b–c) examples of second phase of the second group during which the weight fell from *c.* 5g to *c.* 2g (F-imit.C2-ii: 2565 1992,0119.389, 4.69g, 15mm; 2806 1983,0531.174, 1.52g, 15mm)
d–f) examples of third group of imitations, the phases are distinguished by falling weight standards and increasingly stylised designs (F-imit.C3-i: 2811 1981,0325.36, 4.51g, 13mm; 2831 1980,1004.77, 1.33g, 11mm, 2833 1992,0119.535, 2.95g, 16mm)
g) example of the fourth group of imitations, these types tend to imitate the shallow curve at the bottom of the overcoat on the first group of official imitations (F-imit.C4-i: 2850 1992,0119.587, 4.80g, 17mm)
h) example of the fifth group of imitations, these types tend to imitate the exaggerated points of the overcoat on the second group of imitations (F-imit.C5-i: 2977 1922,0424.4504, 3.33g, 13mm)

Sasanians after they took over Bactra/Balkh. The gold imitations appear to be a continuing production of the Balkh mint as when coins of the same type began to be issued in the name of the third Kushano-Sasanian king Peroz I, they were then followed by coins with more Sasanian-style designs, which included coins in the name of the Balkh mint. The location of the mint producing the copper imitations is not clear, but is also likely to be in Bactria/Tokharistan.

The third phase (F-imit.C2-iii) and all the other imitations series (F-imit.C3, C4 and C5) that follow are copied from the first two phases of imitations. They are classified by their progressive departure from the early imitations. These crude imitations seem to have been unofficially produced in response to continuing demand and are found in hoards of later Kushano-Sasanian coins down to the end of that dynasty (Cribb 1985c). They played an important and persistent part of the monetary economy of the region in spite

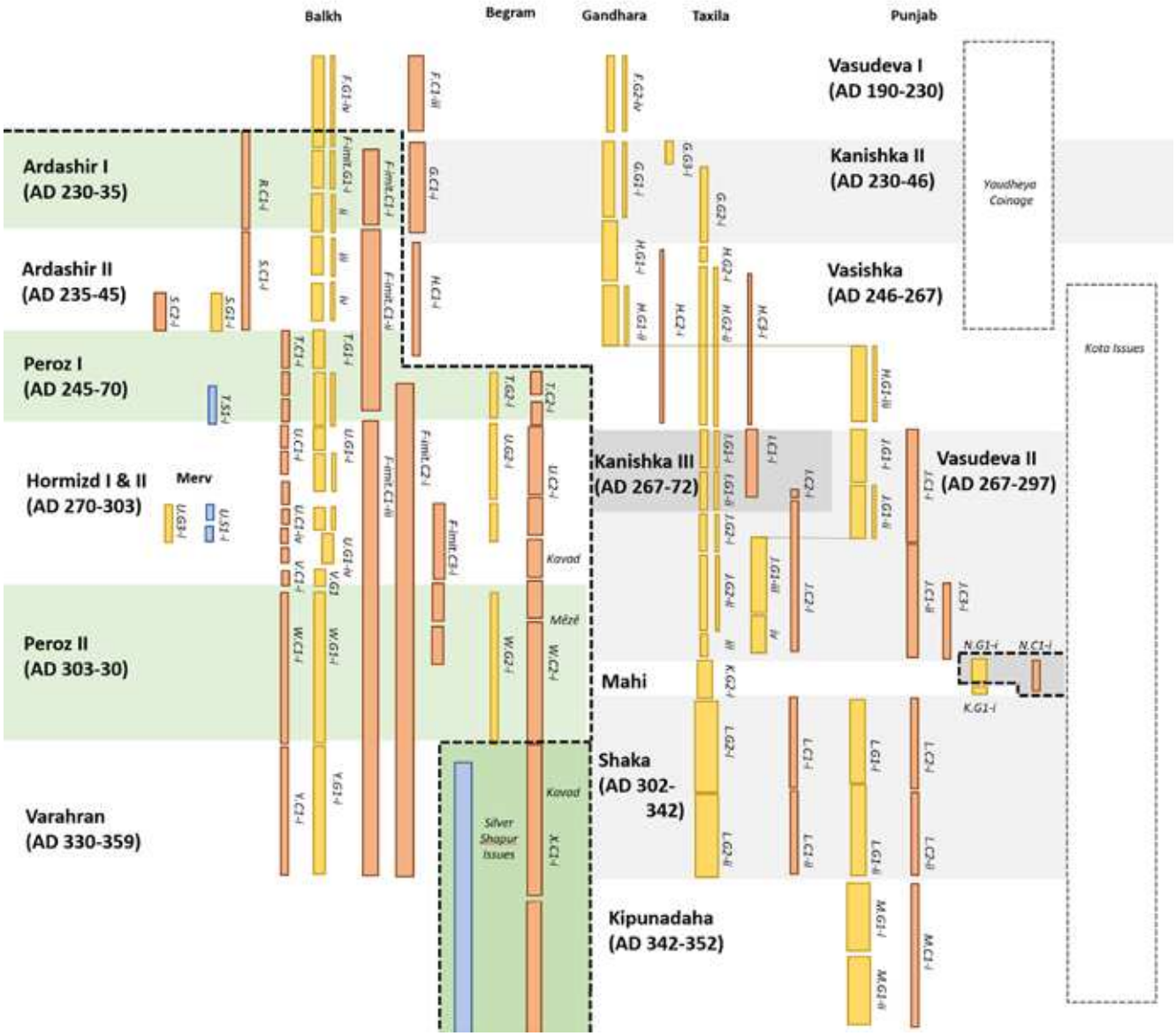


Figure 3.57 Production diagram
Minting chart illustrating the production of Kushan coins from the reign of Kanishka II to the end of the dynasty and the contemporary and related productions of the Kushanshahs and Sasanians

of their decreasing size and poor manufacture. They circulated widely and have been reported from north of the Oxus/Amudarya (Zeymal 1983, 246–50; Rtveladze and Pidaev 1981, 82–5) and are plentiful at Begram (Errington 2021a, 177–8) and Taxila (Khan 2010a) and even reached into India (Srivastava 1988; Prasad 2014, 114–19).

A hoard containing copper imitations of the first phase of 'Vasudeva imitations' (F-imit.C1-i) found in Gandhara points to the chronology of the start of the imitation copper series (Cribb *et al.* 2012). These 12 coins, including types with both swastika (*ibid.*, 121–2, nos 027, 132 and 183) and the triangle symbol (*ibid.*, 121–2, nos 138, 190, 121, 208, 014, 203 and 033), were within a hoard otherwise composed of 20 late Vasudeva I (F.C1-iii), 139 Kanishka II (G.C1-i) and 41 Vasishka (H.C1-i) copper coins. The average weight of the imitations, *c.* 6.5g, placed them within the range of the coins of Kanishka II (10–5g, average weight *c.* 7.2g) and Vasishka (7–3g, average weight 5.8g). This suggests that the copper imitations began late in the reign of Kanishka II, and therefore that the associated gold imitations with swastika (F-imit.G1-i and -ii) and triangular symbol (F-imit.G1-iv) also began during the same period.

G–N Coinage of the contracting Kushan empire

The loss of the northern part of the empire at the end of Vasudeva I's reign impacted on the production of coinage, but not on the structure of the monetary system. Gold dinars and occasional quarters together with copper units continued to serve as the components of the system. It appears that the costs of war and reduction of access to monetary metals caused the fineness of the gold coins and the weight standard of the copper coins to gradually decline, so that by the end of the dynasty the dinars became debased to about SG 12.5 (*c.* 42% gold) and then collapsed to having virtually no gold content and the copper units weighed less than 3g. The gold debasement affected other dynasties as well, so the precise cause remains unclear. The loss of the main gold mint threw the role of main producer of gold coins onto the mint which had previously served as the subsidiary gold mint. Later in the reign of Kanishka II a

second mint further east was opened and took on the role of subsidiary gold mint. Initially, copper coinage was made only at the Begram mint, but when this was also lost to the Sasanian invaders in the reign of Vasishka other copper mints were opened further east. The two gold mint arrangement continued until the last reign, but disruption of production in the late 3rd century, perhaps again in response to Sasanian incursions, meant that the roles were again reversed between the main and subsidiary mints with the latter producing the bulk of coinage from Mahi's reign (K.G2-i). In the last reign under Kipunadha only one mint survived in operation. The production system also suffered as a consequence of internal political issues when Vasudeva II disputed the succession of Kanishka III and eventually ousted him and at the end of his reign a non-Kushan usurper, Meśra, disrupted the succession of the Kushan emperor Mahi. Under the next king, Shaka, the shrinking empire managed to maintain its monetary system. The fall of the empire, under Kipunadha, was caused by the seizure of power by the Kidarite Huns on one side and the expansion of the Gupta empire on the other.

The gold coins used a less diverse range of designs than had been used at the height of the empire; all the coins, with rare exceptions, featured a standing king obverse and one of two deities on the reverse, either standing Oesho with bull or enthroned Ardochsho. The earlier practice of changing forms of royal imagery and varying deities was replaced by the control mark system introduced at the subsidiary mint under Vasudeva I. At first this was a continuation of that mint's system, but it was also used at the other mint when it reopened. The control marks originally consisted of small Brahmi, Kharoshthi or Greek letters, but over time Brahmi came to dominate and they became larger and more prominent. Late in Kanishka II's reign some single letters were replaced by monograms of vertically linked letters. Under Vasudeva II one of the monograms represented the king's name and in subsequent reigns this became a fixed system. The control marks enable the two mints to be distinguished and the progression of production to be understood from the reign of Kanishka II. The distinction between the mints at this time (Kanishka II to Vasudeva II) also involved a system of distinct types which had the main mint depicting the king in an overcoat over tunic and leggings and using the goddess Ardochsho on the reverse while the subsidiary mint was depicting him in armour with Oesho and bull on the reverse. At the end of Vasudeva II's reign a decision was made to unify the design system so that all coins used the representation from the main mint and the distinction between mints was solely by control marks. The distinction between the mints is also visible through the different treatments of the unified designs by the artists who cut the dies (see §J.1 below).

G.1 Kanishka II, seventh Kushan ruler, c. AD 230–46: reduction of the empire

The issue of gold dinars and quarters, and of copper units, continued through the reign of Kanishka II, but there was a change in the organisation of the mints. The former main Kushan gold mint at Balkh, which had made coins from the reign of Wima Kadphises through to that of Vasudeva I, stopped its production. This cessation of Kushan coinage appears to be a consequence of the invasion of Bactria/Tokharistan by the Sasanian king, Ardashir I. The mint at Balkh seems to have been taken over by the Sasanian administration. When the Kushan production ceased, the Sasanians, under a local king with the title 'Kushan king' (Kushanshah) used the mint to produce imitations of Vasudeva I and Kanishka II's coins. These imitations are discussed above (§F.3) at the end of Vasudeva I's listing (F-imit.G1).

The subsidiary gold mint of the previous reign continued in production (G.G1), issuing dinars and quarters and showing the king wearing an overcoat over tunic and leggings with enthroned Ardochsho reverses, with the inscription ÞAONANO ÞAO KANHÞKO KOÞANO. The loss of the Balkh mint meant the subsidiary mint now became the main gold mint (G.G1). It continued the same system of control marks as it had through the last phase of Vasudeva I, marking the coins with Brahmi, Kharoshthi and Greek letters, and initially it still had only one work station. The same control marks Greek B and Brahmi *ha* overlapped the transition from Vasudeva I to Kanishka II, and an example of a quarter dinar (G.G1 1/4d, obverse 2A) with these control marks is recorded, struck with an obverse die of Vasudeva I and a reverse die of Kanishka II from this mint.

The production sequence of the main gold mint can be followed through the reign by the gradual changes in control marks (**Table 3.9**). Late in the first phase of the main gold mint the control mark Brahmi *vi* (which continued into the next reign), was replaced on some dies by a different control mark, perhaps to indicate a second work station. The die used went through two recuts transforming the initial Brahmi *a* into a *pu* and adding to it another mark, perhaps the Brahmi monogram *harva* (G.G1-i 1d, obverses 3B–3D). Two further dies using *harva* were made, but linked with the Brahmi mark *ru* which was used on dies with *vi* in this and the next phase.

In the last phase of production under Kanishka II at the main gold mint (H.G1-i) a Kharoshthi *pa* control mark was introduced alongside the Brahmi *vi* mark. This control mark also marked the issues of a new subsidiary mint at the end of Kanishka II's reign (G.G2-i) with the king wearing armour on the obverse and Oesho and bull on the reverse, continuing the designs used under Vasudeva I (**Table 3.10**). At first both these issues used the Kharoshthi *pa* and Brahmi *ru* control marks, which had already been used at the end of the first phase at the main gold mint. It is unclear how the introduction of two types using the same control mark is to be interpreted. Both series continue into the reign of Vasishka, so they cannot be explained as sequential, but run in parallel. Attributing them to two different mints is the simplest explanation, but they could represent parallel production at the same mint. After the first issues of the main mint's second phase (G.G1-ii) and the subsidiary mint's first phase (G.G2-i), using the Kharoshthi *pa* and Brahmi *vi* the Brahmi *ru* was replaced at both mints by Brahmi *thā*. During the reign of Vasishka (see §H.1) the Kharoshthi *pa* and the Brahmi *vi* were replaced by other marks, but the Brahmi *thā* continued at both mints.

Apart from the production at the main and subsidiary gold mints there is a third production of gold coins (G.G3-i). This is

King	Phase	Obv.	Right field a	Right field b	Upper left	By fire altar	Between legs	Rev.	Upper right	Centre right	Lower right	Lower left	Below diadem
Kanishka II	G.G1-i	1A	Gr B			*ha*		1a					
		1B	*bhi*			*ha*		1a					
		1B	*bhi*			*ha*		2a					*ha*
		2A	*vi*			*ha*		4a			*la*		
		2A	*vi*			*ha*		4b				*la*	
		2A	*vi*			*ha*		4c		*la*			
		2A	*vi*			*ha*		3a	*pu*				
		2A	*vi*			*ha*		3b		*ha*		*pu*	
		2A	*vi*			*ha*		4d	*ru*			*la*	
		2C	*vi*			*pu*		4b				*la*	
		2C	*vi*			*pu*		4c		*la*		*pu*	
		2E	*vi*					4c		*la*			
		2E	*vi*					1a					
		2E	*vi*					3c	*pu*			*la*	
		2E	*vi*					5d				*ru*	
		3A	*a*			*la*		5b			*ga*	*ru*	
		3B	*harva*	*a*		*la*		5b			*ga*	*ru*	
		3C	*harva*	*pu*		*la*		5b			*ga*	*ru*	
		3C	*harva*	*pu*		*la*		5c			*ru*	*ga*	
		3D	*harva*	*ru*		*la*		5b			*ga*	*ru*	
		3D	*harva*	*ru*		*la*		5d				*ru*	
Kanishka II transitional	H.G1-i	1A	*vi*	*ru*		Kh *pa*		1a	*ru*				
		1B	*vi*			Kh *pa*		1b	*thā*				
		1C	*vi*			Kh *pa*	*thā*	1c				*ru*	
		1D	*vi*			Kh *pa*	*thā*	1b	*thā*				
Vasishka transitional	H.G1-i	2A	*vi*			Kh *pa*	*thā*	1b	*thā*				
		2B	*e*			Kh *pa*	*thā*	1b	*thā*				
Vasishka	H.G1-ii	1A	*si*			*mā*	*thā*	1a	*thā*				
		2A	*chu*			*mā*	*thā*	1a	*thā*				
		2B	*chu*			*ga*?	*tha*	1a	*thā*				
Vasishka	H.G1-iii	1A	*hivara*		∴	*ga*	*do*	1a					
		1B	*hivara*		∴	*ga*	*va*	1a					
		1B	*hivara*		∴	*ga*	*va*	1b				*da*	
		2A	*chu*		∴	*ga*	*va*	1b				*da*	
		2B	*chu*			*ga*	*va*	1a					
		2C	*chu**			*ga*	*va*	1a					
		3A	*chu*			*ga*	*va*	1a					
		3B	*chu*	Kh *ga*		*ga*	*va*	1a					
		4A	*śuchu*			*khara*	*va*	1a					
		4B	*śuchu*			*khara*	*ba*	1a					
		5A	*chu*	Gr *A**		*khu*	*va*	1a					
		5B	*chu*			*kha*	*va*	1a					
		5C	*chu*			*khu*	*va*	1c					

Vasishka 1A–2C curved hemmed skirt, 3A–5C straighter hemmed skirt; * *chu* and Greek A under king's arm; Gr = Greek; Kh = Kharoshthi

Table 3.9 Main gold mint: king wearing an overcoat/Ardochsho control marks sequence from Kanishka II to Vasishka

	Phase	Obv.	Right 1	Right 2	Right down	Left	Below	Rev.	Right up	Right middle	Right down	Left	Below
Kanishka II	G.G2-i	1A				Kh *pa*	*pu*	1a	*ru*				
		1B			*ru*	Kh *pa*		1a	*ru*				
		1C	*vi*			Kh *pa*	*thā*	1a	*ru*				
		1C	*vi*			Kh *pa*	*thā*	1b	*thā*				
		1C	*vi*			Kh *pa*	*thā*	1c				*thā*	
		2A	*vi*	nan-di-pada		Kh *pa*		1c				*thā*	
		2A	*vi*	nan-di-pada		Kh *pa*		1d				dots	
Vasishka	H.G1-i	1A	*vi*			Kh *pa*	*thā*	1a				*thā*	
		1A	*vi*			Kh *pa*	*thā*	1b					*thā*
Vasishka	H.G1-ii	1A	*ā*			*me*	*thā*	1a	*thā*			∴	
		1B	*ā*			*ha*	*thā*	1b					
		1C	*ā*			*ga*	*thā*	1b					
		1D	*ā*		*śu*		*thā*	1b					
		2A	*ā*	Gr A*	*śu*		*thā*						
		2B	*ā*	Gr A*			*thā*						
		2C	*ā*	Gr A*									

* Greek A under king's arm

Table 3.10 Subsidiary gold mint: king in armour/Oesho and bull control marks sequence from Kanishka II to Vasishka

represented by just three extant coins all with king in armour obverses and Ardochsho reverses. They have a Brahmi control mark *pa* which does not fit into the system at either mint. The use of king in armour links these coins with the coin designs of the previous reign and with the subsidiary mint. The use of Ardochsho reverses, however, links them with the main gold mint. The style of the coins and the treatment of the Ardochsho designs makes them very different to the products of either the main or the subsidiary mint. One of the Ardochsho reverses, showing her standing (1b), is copied from late coins of Huvishka (E.G1-v and -vi, reverse 1e); the other (2a) is in a similar style but shows a seated Ardochsho on a backless throne in a posture, not seen elsewhere on Kushan coins, holding a flower and a palm. The connections presented by these coins suggest that the mint was operating early in Kanishka II's reign and may have been intended to stand in for the Balkh mint in the period before the new subsidiary mint was established. A fourth production centre (G.G4-i) is represented by a so far unique gold dinar (Martin 1933, no. 3; Mukherjee 1969, pl. 1, no. 1) featuring a novel reverse design featuring the Kushan goddess Nana, labelled in Bactrian ΝΩΝΕΙΤΟ (a nomenclature also used under Huvishka, E.G2-iii and -iv, reverse 4f and 4j). The king is depicted on this type in court dress, overcoat over tunic and leggings, but otherwise the designs details are those used in the last phase of Vasudeva I's main gold mint (F.G1-v). There are no control marks on the obverse or dots on the obverse or reverse, but a Greek A on the reverse in the right field. The fabric of this coin is also similar to that of the coins of Vasudeva I's main mint last phase, raising the possibility that this was the last issue of the Kushan gold mint at Balkh before the Kushano-Sasanian conquest.

As yet there is no solution to the location of the mints. Both mints (G1 and G2) are south of the Hindu Kush and probably east of the Khyber Pass. The cities now controlled by the Kushans certainly included Peshawar, Taxila, Hund and Mathura but also others in regions of which we have no evidence, such as in Kashmir and the lower Punjab and possibly Sind. Gold coins move over long distances because of their high value, so find spots do not always give clear indications of where mints were located. A hoard, for example, found at Tordher in Swabi, in northern Pakistan, between Peshawar and Taxila and near Hund (Ali *et al.* 2004, 241–50) contains coins with the control mark *thā* which are also common in India beyond Mathura (Srivastava 1980), so the question of mint attribution at this period remains problematic. Ultimately attribution of the mints to particular locations is dependent upon more hoards and site finds being discovered.

G.2 Kanishka II: state of gold coinage to reign of Vasishka (Figs 3.58–3.60)

The reign of Kanishka II marks the first dramatic drop in gold fineness under the Kushans, with the restored level at

Figure 3.58 Gold coinage of Kanishka II, main gold mint, Peshawar or Taxila (G.G1)
Gold dinars, and small numbers of quarter dinars, were issued under Kanishka II from a mint in the region of Peshawar or Taxila in two phases. The coins of the second phase are only distinguished by their inscriptions from the first coins issued under Vasishka and so are listed with those (H.G1-i). The loss of Bactria to the Kushano-Sasanians meant that the southern Kushan gold mint took on the role of the main gold mint in this reign. All this mint's coins at this time depict the king wearing an overcoat and the goddess Ardochsho enthroned on the reverse. The types were marked by control marks in the same fashion as had been introduced at the end of the previous reign (F.G2-iv).
a–b) dinar of first phase, with Brahmi control marks *vi* on the obverse and *la* on the reverse, and quarter dinar with Brahmi control mark *vi* on the obverse (G.G1-i: 3029 1853,0301.1319, 7.46g, 21mm; 3032 1894,0506.118, 1.97g, 13mm)
c) dinar of second phase, with Brahmi *vi* and *ru*, and Kharoshthi *pa* control marks on the obverse and Brahmi *ru* on the reverse (G.G1-ii: 3239 1893,0506.32, 7.80g, 21mm)

Figure 3.59 Gold coinage of Kanishka II, subsidiary gold mint, location unknown (G.G2)
Gold dinars were issued from a newly opened mint at an unknown location in the reign of Kanishka II in a single phase. Its issues reused the king in armour and Oesho with bull designs of the Balkh mint under Vasudeva (F.G1-iv and v), but add the Brahmi control marks used at Kanishka II's main gold mint (G.G1).
a) dinar of subsidiary gold mint with Brahmi *vi* and Kharoshthi *pa* control marks on obverse and Brahmi *thā* on the reverse (G.G2-i: 3033 1988,0808.9, 7.9g, 21mm)

Figure 3.60 Gold coinage of Kanishka II, third and fourth gold mints, locations unknown (G.G3 and G.G4)
Gold dinars were briefly issued at two other mints opened in the reign of Kanishka II. One (a) used the king in armour of the subsidiary mint and the other the king in overcoat. They both had non-standard reverse designs. The third mint featured images of Ardochsho (a) while the fourth mint (unpictured) featured enthroned Nana.
a) dinar of the third gold mint, with enthroned Ardochsho reverse, and Brahmi *pa* control mark on the obverse (G.G3-i: 3034 1893,0506.29, 8.09g, 20mm)

Figure 3.61 Copper coinage of Kanishka II, main copper mint, Begram (G.C1)
Copper coins were issued from the mint of Begram throughout the reign of Kanishka II in a single phase, as units of reducing weight. The weight standard began *c.* 9g and fell to *c.* 6g over the reign but the issues cannot be chronologically divided other than by their weight. The design depicts a king in court dress and a seated image of the goddess Ardochsho. The coins have a *vi* control mark in the right field which is usually not visible but may be written in either Brahmi (a) or Kharosthi (b). Many crude examples of the lower weight than 6g are known (c), some of which may be unofficial copies.
a) unit with Brahmi control mark *vi* (G.C1-i: 3043 1922,0424.3593, 7.58g, 20mm)
b) unit with Kharoshthi control mark *vi* (G.C1-i: 3051 1847,1201.290, 8.87g, 20mm)
c) unit crudely engraved and with control mark unclear, a late issue or an unofficial copy (G.C1-i: 3201 OR.7080, 5.54g, 19mm)

the end of Vasudeva I's reign dropping to around SG 17.4 (*c.* 88% gold) and remaining close to that through Kanishka II and most of Vasishka's reign (G.G1-i, H.G1-ii, H.G2-ii). This picture is complicated in three ways. Firstly, a single result from the main mint (G.G1-i) and the early coin produced at the otherwise unknown mint (G.G3-i) are comparable with the last issues of Vasudeva I suggesting the drop occurred early in Kanishka II's reign but not immediately. Secondly, though the number of results is small there is an apparent recovery at the end of the main mint (H.G1-iii) and into the production of Kanishka III (I.G1-i). And thirdly, for the first time in Kushan coinage there is a discrepancy in the second phase of the main mint between the quarters and the full units, with the quarters appearing to have a lower fineness, perhaps in the range SG 16.5–17 (*c.* 82–85% gold).

A discrepancy between full and subunits is not unexpected. It takes the same amount of labour (in terms of preparing dies, blanks and striking) for a subunit but the coin is worth considerably less. In European medieval mints, which are better documented, the purity of the subunit was often reduced to compensate for this additional labour (Challis 1992, 220). It might indicate (in conjunction with increasing levels of production of Kushan coins) that the economic function of the coinage was changing or that mundane factors relating to the coins' usage increasingly outweighed matters of largesse or prestige (see §C.2). However, the precision of the mints in hitting their fineness targets seems to drop in this period and the observation rests on just six quarters and nine full units so it is important to avoid drawing too many conclusions until further systematic analysis has been undertaken.

G.3 Kanishka II: copper coinage (Figs 3.61–3.62)

Production of copper coins during the reign of Kanishka II appears to be entirely from the main copper mint at Begram (G.C1-i), with no evidence of any other copper mints. The same designs were used as at the main gold mint. The same inscription also appears to have been used, but cannot be read in full on any of the examples seen. There are two control marks, both reading *vi*, in Brahmi or in Kharoshthi. As the Brahmi version of this control mark was also extensively used in the gold coinage it suggests that the copper mint was under the same control system. The copper coins of Kanishka II (G.C1-i) are very common and in most cases the control mark cannot be seen. There is a general degeneration of quality and weight standard, perhaps in response to the crisis created by Sasanian incursions. Many of the lighter and cruder examples could be unofficial copies. One series (G-imit.C1-i) of imitations share the triangle mark of the Kushano-Sasanian 'Vasudeva imitations' (F-imit.C1), and there are also copies of these (G-imit.C1-ii).

The consolidation of minting activity south of the Hindu Kush appears to be a consequence of the invasion of Bactria by the Sasanian king Ardashir I of Iran (Alram 2007) which resulted in the loss of the gold mint at Balkh (§F.3). In addition to continuing the production of gold coins the Sasanian administration introduced a copper type (F-imit. C1) which combined elements of Vasudeva I's and Kanishka II's types. These imitations will be found at the end of Vasudeva I's listing. The copper coins of Kanishka II and underweight imitations of them, however, continued to circulate in northern and eastern Bactria (Fussman 1990, 13,

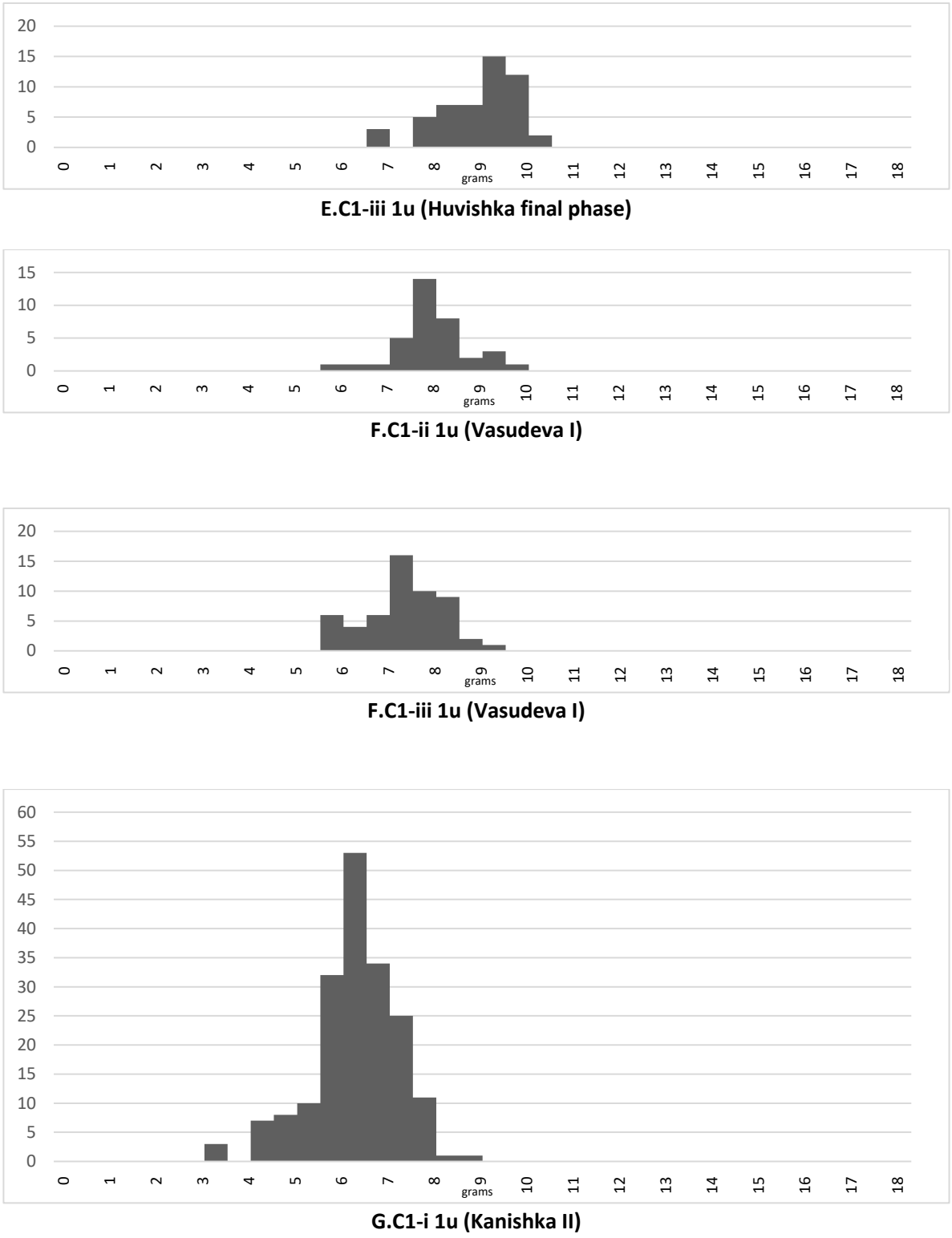


Figure 3.62 Weight chart
Histograms of catalogue data for the main Kushan copper mint illustrating the diminishing weight standard from the end of the reign of Huvishka through the reign of Shaka. Only those phases for which a reasonable number survives are illustrated. The histograms suggest that though the standard progressively dropped reasonable control was maintained at the mint over weight standards at any particular stage

27, 72, misattributed to Vasudeva I; Rtveladze and Pidaev 1981, 82–5; Zeymal 1983, 251–6, both attributing them to Kanishka III), suggesting that the Sasanian Kushanshah did not rule the whole of northern Kushan territory until later when they took over all Kushan territory, in what is now modern Afghanistan, in the next reign.

H.1 Vasishka, eighth Kushan ruler, c. AD 246–67: further contraction of the Kushan state (Figs 3.63–3.64)

The pattern of coinage established by Kanishka II continued into the reign of his successor Vasishka (see **Tables 3.8–3.9**). The main gold mint (H.G1) retained the same king in overcoat/enthroned Ardochsho type, style and control marks as under Kanishka II. There are no

Figure 3.63 Gold coinage of Vasishka, main gold mint, Peshawar or Taxila (H.G1)
Gold dinars, and occasional quarters, were issued throughout the reign of Vasishka at the main gold mint, in three phases. The coins continued the designs of the previous reign, king in court dress and enthroned Ardochsho, and in the first phase it is hard to distinguish the coins of Kanishka II from those of Vasishka. The subsequent phases are distinguished by new control marks.
a) dinar of first phase with Brahmi *vi* and *thā* and Kharoshthi *pa* control marks on the obverse and Brahmi *thā* on the reverse (H.G1-i: 3240 1893,0506.31, 7.83g, 21mm)
b–c) dinar and quarter of second phase with Brahmi *chu*, *thā* and *me* control marks on obverse and Brahmi *thā* on the reverse (H.G1-ii: 3244 1893,0506.35, 7.84g, 22mm; 3250 1892,0202.1, 1.93g, 13mm)
d) dinar of third phase with Brahmi *chu*, *va* and *khu* control marks on the obverse (H.G1-iii: 3255 1889,0502.1, 7.67g, 21mm)

differences in type between the issues of Kanishka II and Vasishka at the point of transition (H.G1-i, obverse 1D to 2A). They are so similar that where the first part of the name, the only distinction, is unreadable then the coin can only be attributed by matching to known legible dies (see **Table 3.9**). The transition from Kanishka II to Vasishka took place late in the period of the overlapping set of control marks (Brahmi *vi* and *thā* and Kharoshthi *pa*), as the majority of identifiable dies have the name of Kanishka II and only one has so far been recognised with the name of Vasishka legible (H.G1-i, obverse 2A). This appears to be a notable breakdown in procedure, as in the preceding century the mint had made considerable efforts in altering the king's image to distinguish coins at the start of a new reign.

The second phase of coinage continues the use of the Brahmi *thā* control mark, but replaced the other marks. The dies of this phase show an unusual feature where the design is outlined on the dies with lines of small dots. This feature also appears in the second and third phases of the subsidiary gold mint, suggesting that personnel were shared between the mints. The third phase of coinage at the main mint follows a disruption in process, which caused the dies to be cut by new engravers (who did not use the dotted lines) and marked with new control marks (H.G1-iii). This disruption could be the result of the Sasanian Kushanshah Peroz I expanding his territory south of the Hindu Kush as far as Peshawar, an expansion recorded by the Sasanian emperor Shapur I, who claimed to rule the Kushan kingdom up to Peshawar (*kwšnhštr HN prhš OL pškbwr*, Kaʿba-ye Zardošt inscription line 3: Huyse 1999, 24 and 36). Peroz I was the first Kushano-Sasanian ruler to issue coins south of the Hindu Kush (either at Begram or Peshawar). The relocation of the Kushan main gold mint in face of Sasanian invasion could explain the radical change of personnel and control mark system. The shared dotted line practice by both mints could represent a movement of the engraver(s) from the main mint to the subsidiary mint for the same reasons.

The sequence of issues in the main mint's third phase is indicated by the gradual shift of control marks, ending with a set of dies used with the final control mark combination of

Figure 3.64 Gold coinage of Vasishka, subsidiary gold mint, location unknown (H.G2)
Gold coins were issued throughout the reign of Vasishka from a second mint, in two phases, primarily as dinars of *c.* 8g, with occasional quarters. The short-lived first phase (unpictured) continued the king in armour and Oesho with bull designs of the previous reign. The bulk of the coins were issued with the same designs in the second phase (a–b), but immediately distinguishable by their crude style.
a–b) dinar of second phase with Greek A and Brahmi *ā* and *thā* control marks on the obverse, and quarter dinar with Brahmi *ā*, *thā* and *ga* control marks on the obverse (H.G2-ii: 3262 1838,EIC.4, 7.83g, 21mm; 3264 1979,0215.2, 1.92g, 13mm)

the phase (one of the dies used to strike obverse 5A and the only die for reverse 1c) being engraved by the same artist who cut the first dies (J.G1-i, obverse 1A) of the reign of Vasudeva II. This continuity of artist also indicates that Vasudeva II succeeded directly after Vasishka at this mint, even though Kanishka III's copper coins show a similar continuity of die engraver at the copper mint (see §H.2 below, series H.C3).

The subsidiary gold mint initially (H.G2-i) continued the king in armour/Oesho and bull types and control marks of the previous reign, but, as at the main mint, the second phase saw the introduction of dies made by new engraver(s) (the ones who engraved dotted lines on their dies) with new control marks, except Brahmi *thā* which continues to be used from phase one into phase two. Towards the end of the second phase the engraving of dies deteriorated and by the end the control marks system seems to have become chaotic. An interesting linkage with production at the main mint can be observed in the introduction towards the end of the reign of a Greek A control mark under the king's arm at both mints (H.G1-iii, obverse 5A and H.G2-ii, obverses 2A–C).

Initially the Bactrian inscriptions on his gold coins were well written: ÞAONANO ÞAO BAZHÞKO KOÞANO, but the die engravers of phase two at both mints blunder Bactrian inscriptions, so the later coins are only attributable to Vasishka on the basis of the continuity of the same types and control mark systems.

H.2: Vasishka: copper coinage (Fig. 3.65)

No copper coin survives with an inscription mentioning Vasishka. Issues attributed to his reign have traces of a Bactrian inscription at the edges, parts of which are readable, but no complete inscription has so far been read, and no example with the king's name. Kushan coins after Vasudeva I are often worn and have simplified designs featuring standing kings on the obverse with either Oesho and bull or seated Ardochsho on the reverse. The only exception is a group issued under Vasudeva II (see §J.2). As a result the reconstruction of the copper production remains tentative, and is in part based on the gradual descent of the weight standard and partly on the occurrence of control marks matching those on gold issues.

In the case of copper coins attributed here to Vasishka, there appear to be three stylistically distinct groups, which were struck to a weight standard of *c.* 7 to 4g. That weight would place them between the issues of Kanishka II and the copper coins issued in the name of Vasudeva II. For the purposes of cataloguing these are described as three mints, but readers should note the limited number of legible coins listed. This is probably not an indication that the coinage is small, as reported hoards often end with Vasishka (or Kanishka III) copper coins (e.g. Cribb *et al.* 2012) and so might under-represent them, and the tendency to group these and contemporary issues as 'sub-Kushan' distinguished only by the reverse design, Wesho or Ardochsho, also tends to obscure them in archaeological excavations (MacDowall 2005 most recently). Seen as part of a larger group the coins of Vasishka would appear to be low-weight, relatively crude, examples and of limited interest to collectors, which might explain their paucity (a similar argument could be made for Kanishka III) in the British Museum collection.

For this reason the division of these coinages is tentative, and this would apply equally to the contemporary imitations of Vasudeva (F-imit), and will be improved when clearer specimens emerge. The application of this system to archaeological finds from sufficient sites will confirm some readings but also add new varieties, perhaps establish if the Bactrian inscription only partially visible on any example was intelligible, and lead to new attributions. It might transpire that these three groups are, for example, phases of production, rather than separate centres.

Two of these three series show the king in armour with Oesho and bull on the reverse. One series (H.C1) sometimes uses the Brahmi right field control mark *chu* which appears in the same position on some of Vasishka's gold coinage. On some examples of the second group (H.C2) the control mark *thā* can be seen between the king's legs which is also featured on one series of Vasishka's gold coins (H.G1-i and -ii). It seems likely all examples originally had the control mark but only a handful are readable.

The two armoured depictions of the king are quite distinct. Both depict the legs and arms as protected by bands, a standard depiction since the issues of Vasudeva I, but differ in the treatment of the body. The first group (H. C1) depict the upper body and skirt separately, with upper body having a distinct chunky appearance, and the skirt being represented by a grid of lines. The second group

Figure 3.65 Copper coinage of Vasishka, copper mints, locations unknown (H.C1 and C2)
Copper coins were issued from three mints in the reign of Vasishka all as units of *c.* 6g. The mints are distinguished by the style of engraving and designs employed. The first and second mints depicted the king in armour with Oesho and bull on the reverse but the first (a) have a bulky depiction of the king and the second a slighter depiction with a curved hem to his garments (b). The third group, not pictured, showed the king in court dress and used Ardochsho on the reverse.
a) unit of the first copper mint (H.C1-i: 3271 OR.7002, 5.71g, 19mm)
b) unit of the second copper mint (H.C2-i: 3274 OR.7003, 5.71g, 22mm)

(H.C2) use dots to depict the armour, and depict the skirt with a curved lower line. When worn the first depiction is still quite distinctive but the second is easy to confuse with the unarmoured depictions used on Kushanshah imitations.

The third series (H.C3), which shows an unarmoured king in court dress and with Ardochsho enthroned on the reverse, has the control mark *chu* (as H.C1) in the right field and a Brahmi character which appears to be *va* between the king's legs. If this is in fact a *va* it would match the control mark used between the king's legs in the third phase of the main gold mint (H.G1-iii), which raises the possibility that H.C2 and H.C3 might represent successive phases rather than independent production centres. Some issues from this mint may have additional control marks in the right and left fields; on at least two a *ga* appears to be present, but it is hard to distinguish between deliberate control marks and the remnants of the Bactrian inscription.

Hoard and find evidence suggest that the king in armour and Oesho with bull series with *chu* (H.C1) is from Vasishka's westernmost territory as 39 examples survive in Charles Masson's collection from Begram (Errington 2021a, 179–80) and 41 in a hoard from the Peshawar region (Cribb *et al.* 2012), but only 6 at Taxila (Khan 2010a, type H1a). The responsible mint appears to be a continuation of Kanishka II's main copper mint, either still at Begram or relocated to Peshawar.

The other king in armour and Oesho with bull series with *thā* between the legs (H.C2) seems to come from further east, as only 3 examples were collected by Masson at Begram, but 19 have been reported from Taxila (Khan 2010a, type H1b). Both these series are in very different styles, but linked by their types. It could be argued that they represent the two copper mints, with the western mint, at Begram or Peshawar, being the main copper mint and the eastern one, perhaps at Taxila, as the subsidiary copper mint.

The king in court dress and enthroned Ardochsho on the reverse series with the control marks *chu* and *va* is also well represented at Taxila by 12 examples (Khan 2010a, types H2a and b), but absent from Begram, so also from east of Peshawar. Either this series was from a third mint or it represented the main mint after it had been dislocated from Begram/Peshawar by the Sasanian conquest. A similar dislocation is suggested by a shift in the treatment of design discernible at the main gold mint (H.G1) between phases.

The copper coins attributed to Kanishka III (I.C1-i) have a similar stylised depiction of Ardochsho as the third series of Vasishka (H.C3), though the obverse more closely resembles the second series (H.C2) with its dotted armour with a curved hem. In contrast the copper coins of Vasudeva II show no similarity to those of Vasishka. This suggests at least that the types of Vasishka were used as prototypes for Kanishka III but there may be a more direct connection. Two unusually well-preserved examples (see H.C3 coin B and I.C1 coin A) suggest a continuity of personnel between the issues. The first coin has a clear *chu* mark in the right field of the obverse, and the second coin the upper left part of a *phri* in the same position, so they clearly belong to the groups designated as H.C3 and I.C1 here. On the reverse the detail on the lower part of Ardochsho's dress is preserved, and in both cases shows a series of vertical lines split in two by two horizontal lines, which is a very distinctive treatment. It suggests that the same engravers cut both reverse dies and that these two coins, and thus the two series of control marks they represent, were issued at the same mint. If, as argued on the basis of control marks and weight, these two series were

Figure 3.66 Gold and copper coinage of Kanishka III, gold and copper mints, locations unknown (I.G1 and I.C1)
Gold dinars, quarter dinars and copper units were issued, probably all from the same location, in the reign of Kanishka III. The gold coins were issued in two phases, distinguished by control marks, and the copper in two phases, distinguished by type. Both gold and copper coins show the king wearing armour, but have different reverses, Oesho and bull on the gold and Ardochsho on the reverse of the first copper mint's first phase. The copper mint's second phase, not pictured, replaced the normal reverse design with the Kushan tamga.
a) dinar of first phase, with Brahmi *hu*, *gha* and *ga* control marks (I.G1-i: 3277 1893,0506.39, 7.77g, 21mm)
b) dinar of second phase, with Brahmi *phri*, *gha* and *ga* control marks, also distinguished by the changed style of the king's armour (I.G1-ii: 3282 1983,0729.38, 7.9g, 21mm)
c) unit of first copper mint's first phase, with traces of control marks, Brahmi *hu*, *gha* and *ga* (I.C1-i: 3290 1838,EIC.114, 5.37g, 19mm)

issued respectively under the authority of Vasishka and Kanishka III it suggests that this particular copper mint recognised the authority of the latter. This is in sharp contrast to the situation at the gold mints which appear to have gone from issuing coins in the name of Vasishka directly to issuing coins in the name of Vasudeva II.

A single coin (H.C1-i 1u, reverse 2a) is known with the obverse of the first copper mint but an Ardochsho reverse in the style of Kanishka II. This is not the stylised Ardochsho of the third group of Vasishka coins (H.C3). It comes from an unpublished parcel of coins, probably a hoard, held at the Indian Institute of Research in Numismatic Studies in Nasik, and purchased in Delhi, which consisted mostly of imitations (F-imit) with a small number of official Kushan issues, and a few Kota coins. The most likely explanation at present is that this is a contemporary imitation combining elements of Vasishka and Kanishka II coinage, but the design is well executed, so it is possible that it represents an early issue by that mint.

I.1 Kanishka III, ninth Kushan ruler, c. AD 267–72: a brief inheritance (Fig. 3.66)

Kanishka III, son of Vasishka, had only a brief and geographically limited reign, because part, and soon all, of his father's territory appears to have come under the control of a different successor, Vasudeva II (see §J.1 below). Details of the succession are necessarily vague as, apart from the Ara inscription naming Kanishka III as son of Vasishka (line 2, calls him *vajheṣkaputra*: Skinner 189; CKI 158), there is little evidence beyond the coins.

Kanishka III's coinage is only known from a single mint, apparently issuing both gold (I.G1-i and -ii) and copper coins (I.C1-i). The location of the mint may have been somewhere near Hund, close to where his only inscription as king was found. The gold coins, dinars and quarter dinars, all show an armoured king on the obverse and Oesho and bull on the reverse, with a Brahmi *gho* between the king's legs, and are distinguished into two phases by their control marks and changes in gold content and style. The style of these coins and their control marks shows no connection with the issues attributed to the reign of Vasishka, so a new gold mint, with new personnel was probably established. A slight improvement was made in the use of Bactrian as the king's name and titles, ÞAONANO ÞAO KANHÞKO KOÞANO, can be read on most examples. Like the coins of Vasishka their gold content was reduced, but to a lesser degree.

The copper coins (I.C1-i) share their style and control marks with the gold issues, but have squat seated Ardochsho reverse, like the issues of Vasishka (H.C3), suggesting that these coins were the work of the same die engraver (see §H.2 above) and that Kanishka III was able to keep control of one of Vasishka's copper mints. The *c.* 5.5g weight standard of Kanishka III's copper coins, showed a continuation of the decline seen in previous reigns.

The location of Kanishka III's mint is likely to be within the territory he was able to hold onto in the face of Vasudeva II's usurpation. The only indication of where this territory was is the inscription made in his reign, found at Ara, near the ancient site of Hund (this is the last direct epigraphic evidence of the Kushan kings). This lies almost half way

Figure 3.67 Gold coinage of Vasudeva II, main gold, location unknown (J.G1)
Gold dinars, and occasional quarter dinars, were issued throughout the reign of Vasudeva II from the main mint, in four phases at a standard of *c.* 7.8g. All coins use the same standing king and enthroned goddess design and the phases are distinguished by the gradually changing style and by a system of control marks. The gold content of the coins drops markedly over the course of the reign but this is not apparent from the appearance of the coins.
a) dinar of first phase, with Brahmi control marks, *vasu*, *cu* and *khu* on the obverse (J.G1-i: 3294 1889,0506.2, 7.82g, 23mm)
b) dinar of second phase, with Brahmi control marks, *vasu*, *cu* and *sa* on the obverse (J.G1-ii: 3297 1860,1220.221, 7.81g, 22mm)
c) dinar of third phase, with Brahmi control marks, *vasu*, *ga*, *vi* and *bha* on the obverse (J.G1-iii: 3300 1850,0305.197, 7.66g, 22mm)
d) dinar of fourth phase, with Brahmi control marks, *vasu*, *ga* and *bha* on the obverse (J.G1-iv: 3303 1845,0613.85, 7.78g, 21mm)

between Peshawar and Taxila. The mint is unlikely to be at Peshawar which was already under Kushano-Sasanian control, so Hund or Taxila seem plausible.

An interesting feature of Kanishka III's gold coinage is their adoption of design features (the treatment of ribbons on the trident) and control marks (dots) usually associated with the Kushanshah rulers. This has obvious implications for his reign (see Ch. 2 §I.6).

J.1 Vasudeva II, tenth Kushan ruler, c. AD 267–97: a successful usurpation (Figs 3.67–68)

The coins of Vasudeva II are the only evidence for his reign. The links between his gold coins and those of Vasishka and Kanishka III position his coins and his reign, showing him succeeding at Vasishka's main gold mint and Kanishka III's gold mint.

The gold coinage of Vasudeva II at his main gold mint (J.G1) immediately followed on from that of Vasishka at his gold mint, with its first dies (J.G1-i, obverses 1A and 1B, reverse 1a) executed by the same person as had engraved the last die (H.G1-iii, obverse 5A) of Vasishka's coinage. The obverse and reverse dies of these coins show characteristic features peculiar to this engraver, such as the triangular ribbon tie on the trident over the altar, the pattern of the overcoat decoration on the obverses and the diagonally positioned tamga with triangular base and the singular corruption of the Bactrian inscription on the reverses. They both also have the same control mark Brahmi *khu* by the altar (see **Tables 3.9**, **3.11**). This suggests that Vasudeva II usurped the Kushan throne from Kanishka III at the beginning of his reign leaving the legitimate king, son of the previous ruler (Ara inscription Skinner 189; CKI 158), with only part of his territory, unable to control the main mint. There is no evidence of Vasishka's subsidiary mint continuing into this reign, but its king in armour/Oesho and bull type was used by Kanishka III's only mint (I.G1) and was copied from Kanishka III's version of the design (I.G1-ii) by Vasudeva II's subsidiary mint (J.G2) after Kanishka III's

Figure 3.68 Gold coinage of Vasudeva II, subsidiary gold, location unknown (J.G2)
Gold dinars and quarter dinars were issued during the reign of Vasudeva II from a subsidiary mint, in three phases at a standard of *c.* 7.8g. The first two phases (a–c) used the same king in armour and Oesho and bull designs as the coinage of Kanishka III (I.G1-ii), but are distinguished by their inscriptions and control marks. In the third phase (d) the mint departed from this design and issued coins adopting the types of the main mint (J.G1).
a–b) dinar and quarter dinar of first phase, with Brahmi *rda* monogram, *gha* and *ga* control marks; some dies in this phase have blundered inscriptions (J.G2-i: 3310 1847,1201.261, 7.74g, 21mm; 3311 1956,0205.1, 1.87g, 13mm)
c) dinar of second phase, with Brahmi *rda*, *dra* and *raju* monogram control marks (J.G2-ii: 3315 1946,1004.715, 7.84g, 22mm)
d) dinar of third phase with Brahmi monogram *vasu*, and control mark *bhṛi* on the obverse (J.G2-iii: 3320 1890,1104.3, 7.62g, 19mm)

coinage ceased. This suggests that Vasudeva II's usurpation was successful in taking over the only mint Kanishka III controlled.

At the main gold mint the same designs as under Vasishka were used showing the king wearing an overcoat over tunic and leggings on the obverse and enthroned Ardochsho on the reverse. An innovation for the new reign was the replacement of the main control mark in the right field on the obverse with a Brahmi monogram *vasu*, representing the first part of the king's name. The early issues (J.G1-i and -ii) have legible Bactrian inscriptions giving the king's name and titles: ÞAONANO ÞAO BAZOΔHO KOÞANO, sometimes (J.G1-i, obverse 1B) written anticlockwise to be read from the edge of the coin, but as the issue progressed the Bactrian inscription became less clear, blundered and often off the edge of the coin. There is a clear break in style in the middle of the coinage, which appears to represent a disruption of the mint's activities. All coins struck after the break have the control mark Brahmi *ga* under the king's left arm. This feature already appears on some coins immediately before the break in style (J.G1-iii 2B). At the point of the disruption (J.G2-ii) there are two different treatments of engraving style. The first (known from three dies) showed the king wearing a crown marked with a central vertical line and Ardochsho's throne with all four (or three on some examples) legs visible, the second showed a dotted crown, and a three-legged throne is seen on all examples. The former seems to mark the transition and was accompanied by a large issue of copper coins (J.C1-ii) which appear to have been struck from dies cut by the same engraver. The second treatment appears to be a simplified version of the first and continues to be used until the end of the reign. The copper coinage associated with the first style is a very large issue and is often found overstruck on coins of the fourth Sasanian Kushanshah Hormizd I (U.C2-iii), suggesting the capture from the Kushano-Sasanians of a large amount of copper coins and their transformation into Kushan coins. Hoards of these overstriking coins suggest their issue in Gandhara (see Ch. 2 §J.1), so it is possible the disruption in the gold mint represented a move of the mint back into Gandhara.

A second gold mint (J.G2-i) also commenced production but not at the beginning of the reign. The second gold mint is a continuation of the mint used to strike coins in the name of Kanishka III, so probably represents the completion of Vasudeva II's usurpation of Kanishka III's throne. The same style and designs, king in armour and Oesho and bull, were used as had been used for Kanishka III. The control mark Brahmi *gho* between the king's legs was retained from the previous reign, and on the first issue the Brahmi control mark *ga* between the king's leg and altar is also retained. As at the main mint this *ga* is then moved to under the king's left arm. This is followed by dies with a new set of control marks (J.G2-ii) in addition to the *gho*: *rada*, *raju* and Kharoshthi *dra*(?).

The Bactrian inscription ÞAONANO ÞAO BAZOΔHO KOÞANO is used for the first issue dies, with *ga* by the altar; it is then blundered on the dies with *ga* under the arm, but is restored in the second phase. In one set of dies this blundering presents the reading ÞAONANO ÞAO BAZO KOÞANO KOÞAO which has prompted an attempt to create a king Vaskushano (Falk 2015a, 127) and link him with the

		Obv.	Obverse	Right field	Under arm	Beneath sceptre	By fire altar	Between legs	Reverse	Rev.	Upper right/left
main mint	J.G1-i	1A–1B	style a	*vasu*			*khu*	*cu*	Ardochsho	1a–1b	
	J.G1-ii	1A	style a	*vasu*			*sa*	*cu*	Ardochsho	1a–1b	
		1B	style a	*vasu*			*sa*	*ci*	Ardochsho	1a–1b	
	J.G1-iii	1A	style b	*vasu*			*bha*	*ci*	Ardochsho	1a	
		2A	style b	*vasu*		*ga*	*bha*	*ci*	Ardochsho	1a	
		2B	style b	*vasu*	*ga*		*bha*	*ci*	Ardochsho	1a	
	J.G1-iv	1A	style c1	*vasu*	*ga*		*bha*		Ardochsho	1a	
		1A	style c2	*vasu*	*ga*		*bha*		Ardochsho	1a	
		1A	style c2	*vasu*	*ga*		*bha*		Ardochsho	1b	∴
		1B	style c2	*vasu*	*ga*		*vi*		Ardochsho	1a	
		1B	style c2	*vasu*	*ga*		*vi*		Ardochsho	1b	∴
		1C	style c2	*vasu*	*ga*				Ardochsho	1a	
		1C	style c2	*vasu*	*ga*				Ardochsho	1b	∴
subsidiary mint	J.G2-i	1A		*rada*			*ga*	*gho*	Oesh	1a	dot
		1B		*rada*	*ga*			*gho*	Oesh	1a	dot
	J.G2-ii	1A		*rada*		Kh *dra*	*raju*	*gho*	Oesh	1a	dot
		1A		*rada*		Kh *dra*	*raju*	*gho*	Oesh	1b	
	J.G2-iii	1A	style c2	*vasu*	*śe*		*vi*		Ardochsho	1a	
		1B	style c2	*vasu*	*bhṛi*				Ardochsho	1a	

Kh = Kharoshthi; all other marks are Brahmi

Table 3.11 Vasudeva II gold control marks

abbreviation of the name Vasishka as Vas in a Brahmi inscription dated year 22 (Shrava 58; Skinner 182), though the coin was issued much later (after Kanishka III's reign), far too late to be connected with that inscription (Ch. 2 §J.1). On the reverse of coins with the most blundered obverse inscription, part of the obverse inscription ÞAONA has been used in place of the usual OHÞO inscription, a further indication of the incompetence and illiteracy of the die engraver and the blundered nature of the obverse inscription. It is worth noting that though there is a general trend on later Kushan coins for the Bactrian inscription to be blundered and potentially unreadable it does not proceed smoothly. Likely the sudden shifts between readable and blundered inscriptions reflect the varying familiarity of individual mint workers with Bactrian.

The location of this mint is not clear, but it is likely to be in the same location as it was under Kanishka III before it was taken from him by Vasudeva II.

Towards the end of the reign a third phase of coins was issued (J.G2-iii). The design and style were copied from the main mint coinage, but with different control marks and minor differences in the design on obverse and reverse. In the following two reigns these differences mark the distinction between the two gold mints in operation. On the main mint coins the king is shown with his right hand held open over the altar and Ardochsho's throne has a single upright to the left of the goddess (i.e. on the right of the coin). On the third phase coins at the subsidiary mint the king has a closed right hand, with finger and thumb touching and there is a double upright to the left of the goddess.

The third set of coins are marked with either a Brahmi *śe* or *bhṛi* under the king's left arm, where *ga* is placed on the main mint coins. Their position at the end of the coinage and the continuity of the differentiating features into the next reigns suggest that the third set was introduced at the subsidiary gold mint as a final phase, replacing the Oesho and bull coins.

The gold fineness of the coins appears to drop again across Vasudeva II's reign with the bulk of the coins averaging just under SG 17 (*c.* 85% gold). However, the early issues at the subsidiary mint have a very high gold content, SG 18.44 (*c.* 95% gold), levels comparable with the 2nd century. This is the largest discrepancy between contemporary issues seen in Kushan coinage and it is unclear why it occurred at this point, or what the impact was of a difference that would have been clearly apparent to money changers and merchants. The main mint does seem to regain a degree of stability and by the reigns of Mahi and Shaka (K.G2-i, L.G1-i and early M.G2-i) the gold content seems to have stabilised at about SG 16.1 (*c.* 78% gold) with a return to the earlier precision.

The Kushanshah coinage also suffers a similar debasement over the same period but it never synchronises with the Kushan coinage. In fact the Balkh mint after the Sasanian conquest is much more consistent than under the Kushans, with no apparent attempts to reform or raise the fineness of the coins. The coins which imitate Kushan designs drop gradually from SG 18.38 to SG 18.06 (*c.* 94.5 to 92.5% gold) (F-imit.G1-i and -ii) to SG 17.15 (*c.* 86.5% gold) (F. imit.G1-iii) to SG 16.55 (82% gold) (F-imit.G1-iv), and by the time the Kushanshah are regularly issuing gold in their own name (T.G1-ii) the fineness, SG 15.9 (*c.* 77% gold), has already fallen to a level below that reached by Kushan coins in the early reign of Shaka. So it seems the Kushanshah coinage

Figure 3.69 Copper coinage of Vasudeva II, copper mints, locations unknown (J.C1–C3)
Copper coins were issued from at least three mints during the reign of Vasudeva II in units of *c.* 4g. Only the issues of the main mint are well represented in modern collections and can be divided into two phases, the first using a standing king (a) and the second an unusual seated king (b). The second mint (c), using a royal tamga on the reverse, was until recently known from only by a few examples so the structure of its issues is still unclear. The third group (d) were types with Oesho and bull reverse whose relationship is also unclear due to paucity of evidence. A number of coins with odd style (e) are known and probably represent local production centres of an unofficial nature.
a) unit of the first phase of the first copper mint, with standing king in court dress and enthroned Ardochsho (J.C1-i: 3339 1992,0119.359 4.13g, 17mm)
b) copper unit of the second phase of the first copper mint, with enthroned king in court dress and enthroned Ardochsho, coins of this phase are often overstruck on Kushano-Sasanian coins of Hormizd II's Kavad type (J.C1-ii: 3352 1992,0119.76, 4.6g, 18mm)
c) unit of the second copper mint, with Brahmi *vasu* monogram and royal tamga (J.C2-i: 3437 1893,0506.27, 3.56g, 16mm)
d) unit of the third copper mint (J.C3-i: 3439 1992,0119.615, 3.47, 17mm)
e) example of imitation of the issues of the first copper mint's first phase (J-imit.C1-i: 3445 1992,0119.375, 3.84g, 17mm)

falls faster and much more consistently than its Kushan equivalent.

This reduction in gold content could have other reasons than the strain created by the shrinkage of the Kushan domain. If, for example, the Kushan coinage had come to have a significant market function in the 3rd century, then it is possible that the diminishing fineness of the Kushanshah issues may have driven the Kushan administration to further reduce the fineness of its own coins.

J.2 Vasudeva II: copper coinage (Fig. 3.69)

The copper coinage of this period is more varied than in previous reigns. Most of the issues seem to come from the same administration as the main gold mint and it is likely that the copper mint was attached to this gold mint. The obverse of the first phase (J.C1-i) initially features a standing king wearing tunic and leggings under overcoat and the reverse enthroned Ardochsho in the same style as the gold coinage of the main mint, with the name of the king *vasu* in Brahmi in the right field, and control marks of the second phase at the main gold mint (J.G1-ii). A second phase (J.C1-ii) corresponds with the gold coinage (J.G1-iii) after the period of disruption in the main gold mint. It has the same control marks and reverse design, but the obverse shows the king enthroned and holding a diadem. The engraving of the dies for this issue closely matches the gold dies (J.G1-iii, style c1, see **Table 3.11**) from the beginning of the post-disruption period. These copper coins are recorded overstruck on Kushano-Sasanian issues, the first series (J.C1-i) on coins of the Kushano-Sasanian king Peroz I (T.C2-ii) and the second series (J.C1-ii) on coins of his successor Hormizd I, bearing the name Kavad (U.C2-iii). These overstrikes are suggestive of conflict between the Kushans and Kushano-Sasanians; perhaps this conflict is also the reason for the disruption in the main mint, though disruption need not mean a loss of territory. That Kushan copper issues almost always overstrike Kushanshah rather than vice-versa, and that Kanishka III's mint is taken over by Vasudeva II, indicates territorial expansion rather than contraction, and moving a mint, whatever the reason, will leave similar traces in our surviving evidence.

A curious series of copper coins, perhaps from the second copper mint (J.C2-i), is simply inscribed on the obverse with the king's Brahmi monogram *vasu* and the Kushan royal

Figure 3.70 Gold coinage of Meśra, gold mint, location unknown (N.G1)
Gold dinars and copper units, not pictured, were issued at mints of unknown location, but probably the main gold and copper mints of Vasudeva II (J.G1 and J.C1), in the name of a king called Meśra, following Kushan denominations and types, but probably not an imperial Kushan issue. The gold coinage was modelled on the issues of Vasudeva II, but the king was shown in different dress. The copper coinage (N.C1-i) replaced the royal image with a bust, wearing the same headdress as the king on the gold coins.
a) dinar with Brahmi *meśra* monogram (on this example missing the vowel mark) and *ga* control marks (N.G1-i: 3669 1984,0110.1, 7.81g, 23mm)

tamga on the reverse in place of the deity. This series could perhaps be attributed to the subsidiary mint, linked with the subsidiary gold mint, as a coin of Kanishka III (I.C1-ii) with just the tamga on the reverse seems to precede this series. The *vasu* monogram type is probably followed by a related set of coins which replace the king's monogram with single Brahmi letters. It is possible that this set of coins with single Brahmi letters continues into the next reign. However, as most of these coins have only recently come to light in the trade their interpretation remains provisional.

A small group of coins with the standing king in overcoat with *vasu* obverse, but different control marks and Oesho and bull reverse (J.C3-i) appear to have been issued at a different mint, or are to be associated with the main mint on the basis of the three-dot motif featured on some of them which appears on the reverses of some phase three coins of the main gold mint (J.G1-iii).

The weight standard of the copper coinage continues to decline through this reign, with most coins within the range 4.5 to 3g.

N.1 Meśra, c. AD 297–300: a brief usurpation (Fig. 3.70)

A series of gold coins in the Kushan style (N.G1-i), but with some significant differences, appear at the end of the reign of Vasudeva II. They all have the name Meśra as a Brahmi monogram *meśra* in place of *vasu* in the right field (the vowel of *me* is missing on some dies), but retain the Brahmi control mark *ga* under the king's left arm as on the last phase of coinage at Vasudeva II's main gold mint. The poor writing of the Brahmi monogram also prompted the misreadings *magra* (Göbl 1984, type 578) or *maśra* (Pokharna 1981; Cribb 1985f). The ruler is depicted in the same posture as the Kushan king, making an offering at a small altar surmounted by a trident, but wearing different garments. His headdress is a rounded cap with a beaded brim, he wears a tunic with a curved hem and leggings, with a strap across his chest and a short dagger hanging from a belt round his waist. On most dies there is a small wheel surmounting his sceptre, but two dies show the usual Kushan sceptre and one shows the king, without the altar and without a trident or sceptre, holding a flower in his raised right hand and resting his left hand on his hip. The inscription in Bactrian is more legible than the late coins of Vasudeva II and says ÞAONANO ÞAO KOÞANO, with various mistakes or missing letters. The reverses show the usual enthroned Ardochsho used by Vasudeva II's main gold mint, including small control marks, three dots at the top right above the throne's crossbar (N.G1-i, reverse 1b), or one dot in the upper right corner of the throne back, both of which can also be found on Vasudeva II coins. Three copper coins of Meśra (N.C1-i) have also been reported as found in the Punjab (Mirza Akbar Baig pers. comm. 2011, found with Vasudeva II coppers and Kushano-Sasanian coppers, mostly imitations). They can be attributed to this ruler by the representation of a bust wearing the same headdress. They have a control mark Brahmi *bhī*. On the reverse they have the same Ardochsho design as Meśra's gold coins and late coins of Vasudeva II's main gold mint. Finds of gold coins have come from further east, in a hoard ending with gold coins of Shaka (G.G2-ii), found at Khetri in Rajasthan (Pokharna 1981) and in a hoard ending with late Vasudeva II gold coins (J.G1-iv), found near Lucknow (Shailendra Bhandare pers. comm. 2018).

The links with Vasudeva II's late issues from his main gold mint and the reduced number of dies for Mahi at that mint, suggest that Meśra usurped Kushan rule (as suggested by Göbl 1984, 38) in that location after Vasudeva II and for a period into Mahi's reign. Mahi's control marks continue into the reign of Shaka, suggesting that Meśra's usurpation ended when Mahi returned the main gold mint to Kushan control. The bust type on his copper coins links him with contemporary Kushano-Sasanian coin design, which also feature the ruler's bust. The departure from Kushan imagery points to Meśra not being a member of the Kushan dynasty even though the Bactrian inscription claims the Kushan name. Thirteen obverse dies have been recorded suggesting several years of rule as Mahi's contemporary.

K.1 Mahi, eleventh Kushan ruler, c. AD 297–302: a brief reign (Fig. 3.71)

This ruler is only known from his gold coins, which have designs and control marks corresponding with the beginning of the next reign. On the basis that his predecessor only put the beginning of his name as a Brahmi monogram on his coins, it seems probable that Mahi is only the first part of his name. Unlike his contemporary Meśra there is no reason to doubt that Mahi was a Kushan as his coins follow directly on from those of Vasudeva II without any indication of change. His coins still have traces of a Bactrian inscription reading ÞAONANO ÞAO – KOÞANO ÞAO (king of kings Kushanshah) but without his name.

His gold coins have the features of both the mints operating at the end of Vasudeva II's reign. The main mint series (K.G1-i) with the open hand on the obverse and the

Figure 3.71 Gold coinage of Mahi, subsidiary gold mint, location unknown (K.G2)
Gold dinars, were issued in the reign of Mahi from two mints, on a weight standard of *c.* 7.8g. The subsidiary gold mint seems to be a continuation of Vasudeva's subsidiary gold mint (J.G2-iii). The main gold mint issued few coins, and seems to have been Vasudeva's main gold mint, which had briefly been under the control of Meśra (N.G1). The mints are distinguished by their control marks and by the treatment of the throne back on the reverse.
a) dinar of subsidiary gold mint with Brahmi monogram *mahi* and *pu* control mark under the king's arm, distinguished from the main mint's production by the two uprights of the throne in the right field of the reverse (K.G2-i: 3453 1847,1201.262, 7.74g, 19mm)

single throne upright have the control mark Brahmi *me* under the king's left arm and the subsidiary gold mint series (K.G2-i) with closed hand and double upright have Brahmi *pu* under the king's left arm. The coinage is scarce and three obverse dies with *me* have been recorded, but thirteen with *pu*. One of the *pu* dies has a lion surmounting the king's sceptre.

A possible explanation for the limited number of dies at the main mint is the issue of coins in the style of the main mint in the name of Meśra, which were issued with the distinctive features of the main mint and with the control mark Brahmi *ga* under the king's left arm as on Vasudeva II's late coins from the main mint.

No copper coins can be directly attributed to Mahi, but it is likely that the issues of the previous reign continued into this period.

L.1 Shaka, twelfth Kushan ruler, c. AD 302–42: continuing decline (Figs 3.72–3.74)

Shaka is only known from his gold coins, on which his name appears as a Brahmi monogram in the right field. He is considered to be a Kushan king because he uses Kushan designs in the sequence traceable back to the beginning of the dynasty. A Kushan king, with the titles *daivaputra ṣāhi-ṣāhānuṣāhi*, and a very similar name is mentioned in Samudragupta's Allahabad inscription, line 23 (Fleet 1888, 8, 14; Bhandarkar and Chhabra 1981, 213, 218). On the coins his name is spelt *ṣaka* or *ṣāka*, whereas the name in the Gupta inscription is *śaka-muruṇḍa*. As the coin inscription is probably only the beginning of his name (as *vasu* on the coins of Vasudeva II), the *muruṇḍa* suffix could complete his full name. The different forms of *s* are probably not significant as both the coins and the inscriptions are transcribing a Kushan name, probably from Bactrian, which does not differentiate between these sounds. Some scholars have attempted to treat each word of this name in the Allahabad inscription and the associated titles as a series of separate peoples, because the last in the list (*muruṇḍaih*) has a plural inflection (Bhandarkar and Chhabra 1981, 29 read it as plural), but the grouping together of the titles and name with only the last part inflected ties them closely together, so it is easier to understand the plural inflection as an honorific usage. Gupta and Kulashreshtha (1994, 120–1) have also identified the coinage in the name Shaka with the Kushan king named in Samudragupta's inscription, with reference to the Mithathal hoard which contained Shaka and Samudragupta coins alongside each other (*ibid.*, 117–19). The traces of Bactrian inscription on the coins offer no confirmation of the full name of Shaka as they are a blundered version of ÞAONANO ÞAO KOÞANO, without the king's name. Copper coins can be attributed to him on the basis of their position as following the issues of Vasudeva II.

The distinguishing features of the two gold mints continue from the previous reign, king with open hand linked with Ardochsho on throne with single upright at the main gold mint (L.G1-i), and closed hand with double upright at the subsidiary gold mint (L.G2-i and -ii). At both mints the phases are separated by the change in spelling of Shaka from *ṣaka* to *ṣāka* (**Table 3.12**). The last phase at the main gold mint (L.G1-ii) adopts the closed hand design of the subsidiary mint, but still distinguishes its issues by their reverse design, with a single upright on the throne and by the diadem ties held by Ardochsho being unladdered. The sequence of changes in control marks is also accompanied by other small changes in treatment, such as the change in vowel length in the king's name, addition of laddering to the diadem ribbons held by the goddess on the late subsidiary mint coins and gradual reduction in flan and die size. The separation of the two series between two mints is reinforced by only subsidiary mint coins of Mahi, Shaka and the last Kushan king Kipunadha being in the Sargodha hoard, found in the Punjab (Mitterwallner 1991).

In the reign of the next king, Kipunadha, only the 'subsidiary' mint was in operation, suggesting that the 'main' mint's role had diminished and may have gone out of production before the end of the reign. An issue of Kushano-Sasanian copper coins by the Sasanian king Shapur II, which were found in number in the Taxila excavations, suggests that part of the former Kushan territory may have been temporarily lost by the Kushans during this period, which may have prompted the closure of one of the mints.

Two interrelated changes seem to have occurred early in the reign of Shaka. The gold standard fell far more dramatically during Shaka's reign than in those of his predecessors, starting close to SG 16.3 (*c.* 80% gold) it fell to about SG 14.1 (*c.* 60% gold) at the main gold mint and to SG 13.4 (*c.* 53% gold) at the subsidiary gold mint by the end of the reign. At the same time the scale of production seems to have risen, as the count of 196 obverse dies from 242 recorded specimens indicates. The number of dies recorded already exceeds that of any of the early Kushan kings but deriving an estimate of the original number of dies used suggests his issue was an order of magnitude larger than for any previous ruler, and this appears to have continued under his successor.

Extrapolating from die studies to the size of a coinage is a complicated and uncertain task (de Callataÿ 2011), as the number of coins each die made is dependent on a series of

Figure 3.72 Gold coinage of Shaka, gold mints, locations unknown (L.G1–G2)
Gold coins were issued through the reign of Shaka from two mints, primarily as dinars, *c.* 7.8g, but with very rare quarters. The gold mints use the same designs and the attribution to mint and phase is made on the basis of the treatment of the reverse, particularly the throne and on a changing system of control marks.
a) dinar of main gold mint, first phase, with Brahmi monogram *ṣaka* and *me* and *ma* control marks, single upright on the throne back (L.G1-i: 3461 1893,0506.42, 7.78g, 21mm)
b) dinar of main gold mint, second phase, with Brahmi monogram *ṣāka* and *sya* and *vi* control marks, single upright on the throne back (L.G1-ii: 3463 1894,0506.186, 7.82g, 19mm)
c) dinar of subsidiary gold mint, first phase, with Brahmi monogram *ṣaka* and *sya* and *bha* control marks, double upright on the throne back (L.G2-i: 3467 1894,0506.187, 7.73g, 20mm)
d) dinar of subsidiary mint, second phase, with Brahmi monograms *ṣaka* and *sita* and *vi* control marks, double upright on the throne back (L.G2-ii: 3474 IOC.553, 7.79g, 18mm)

Figure 3.73 Copper coinage of Shaka, first copper mint, location unknown (L.C1)
Copper coins were issued in the reign of Shaka from the first copper mint in two phases, as units *c.* 3.5g, using a reverse design depicting Ardochsho. The types of the first phase are particularly distinctive as they usually feature a boldly drawn Brahmi control mark beneath the king's left arm (a–b), and at least ten such control marks are known with more probably to be discovered. The second phase coins have a similar style as the first phase coins, but no Brahmi control mark.
a–b) units of first phase with Brahmi *de* and *ṣa* control marks (L.C1-i: 3488 1992,0119.4, 3.63g, 18mm; 3493 1992,0119.1, 2.99g, 16mm)
c) unit of second phase without control mark (L.C1-ii: 3497 1992,0119.346, 3.37g, 20mm)

Figure 3.74 Copper coinage of Shaka, second copper mint, location unknown (L.C2)
Copper coins were issued in the reign of Shaka from a second mint in two phases, as units *c.* 3.5g, featuring a reverse design depicting Oesho. Very little distinguishes these coins from contemporary issues, depicting a king in courtly dress and Oesho, from other centres, official and unofficial, apart from their relatively good engraving and weight standard.
a) unit of first phase with *śa* control mark (L.C2-i: 3511 1992,0119.568, 3.23g, 16mm)
b) unit of second phase (L.C2-ii: 3515 1983,0531.305, 2.83g, 15mm)

Mint	Phase	Obverse	Right 1	Right 2	Left	Reverse throne	Reverse diadem
main	L.G1-i	open hand	*ṣaka*	*me*		single upright	plain ribbons
		open hand	*ṣaka*	*me*	*kho*	single upright	plain ribbons
		open hand	*ṣaka*	*pa*		single upright	plain ribbons
	L.G1-ii	closed hand	*ṣāka*	*bha*	*vi*	single upright	plain ribbons
		closed hand	*ṣāka*	*sita*	*vi*	single upright	plain ribbons
		closed hand	*ṣāka*	*sya*	*bha*	single upright	plain ribbons
		closed hand	*ṣāka*	*sya*	*vi*	single upright	plain ribbons
subsidiary	L.G2-i	closed hand	*ṣaka*	*bhṛi*		double upright	plain ribbons
		closed hand	*ṣaka*	*sita*	*vi*	double upright	plain ribbons
	L.G2-ii	closed hand	*ṣāka*	*sita*	*bha*	double upright	laddered ribbons
		closed hand	*ṣāka*	*sita*	*ja*	double upright	laddered ribbons
		closed hand	*ṣāka*	*sya**	*bha*	double upright	laddered ribbons

* tripartite *sya*

Table 3.12 Sequence of control marks on Shaka's gold coins

factors, and the connection between coins minted and the circulating currency is complex.

A crude estimate of the relative scale of production can be achieved by taking the number of dies used each year on average (**Table 3.13**), though this requires a precise knowledge of how long each coinage was made for. Unfortunately there are no Kushan kings whose reigns can be precisely fixed. Even for Huvishka, whose reign is best attested by inscriptions, the margin of error is large; he ruled for at least 34 years, from the years 26 to 60 (the range of dated inscriptions mentioning him), but may have ruled for as long as 42 years (the range between the last inscription to mention Kanishka I, 23, and the first to mention Vasudeva I, 64). The margin of error becomes even more significant for kings who are not recorded in extant inscriptions. If, for example, it was assumed that Vasudeva II ruled for only 10 years and Shaka for 40 then their production would appear similar.

Despite this lack of clarity certain general patterns are apparent. The production of gold coinage was modest throughout the 2nd century and into the early 3rd. It must have increased significantly in the mid-3rd century, both because Kushan mints were making more coins and also because former Kushan mints (not included in the table above) were minting gold as well. In the 4th century the production of gold coinage increased substantially. Even with the reduction of gold content Shaka's mint would have been putting far more gold into circulation than any preceding king but he was no longer alone. By the mid-4th century the Kushanshah and Kidarites were minting gold alongside the Kushans, as was the Gupta dynasty in northern India. Though no die studies are available for the latter, preliminary examinations indicate the scale was far greater than that of Shaka.

This trend is sufficiently general to suggest that it is not the result of particular exigencies but of broader economic and social shifts. Perhaps Shaka did have a need for more coinage as a result of warfare, and perhaps the collapse in gold content under Kipunadha reflects a loss of access to gold sources, but Vasudeva I and Kanishka II also presumably had military conflicts to pay for and there was no discernible associated increase of production. It is more likely that when gold coinage was first introduced under Wima Kadphises (for the sporadic and disconnected productions see §C.2 above) gold coins served no significant useful economic function. They were likely adapted to systems of largesse and payment specific to the Kushan court's needs under successive emperors, but eventually came to serve an important social and economic function, leading to the increasing production and probably also to the general fall in purity, only in the 3rd and 4th centuries.

The gold content of Shaka's coins was stable at the main mint at the beginning of the reign at about SG 16.1 (*c.* 78% gold), and probably also initially at the subsidiary mint. The

	King	From AD	To AD	No. of years	Coins	Dies	Estimated dies	Average dies/year
C	Wima Kadphises	113	127	10	143	20	23.3	2.3
D	Kanishka I	127	151	24	387	54	62.9	2.6
E	Huvishka	151	190	39	1182	155	178.4	4.6
F	Vasudeva I	190	230	40	470	94	117.5	2.9
F	Vasudeva I (transitional, F.G1-v)				40	23	54.1	
G	Kanishka II	230	246	16	51	24	33.1	2.1
H	Vasishka	246	267	21	278	120	211.1	10.1
I	Kanishka III	267	272	5	73	19	25.7	5.1
J	Vasudeva II	267	297	30	339	144	250.3	8.3
K	Mahi	297	302	5	33	16	31.1	6.2
L	Shaka	302	342	40	242	196	1031.1	25.8
M	Kipunadha	342	352	10	316	249	1174.4	117.4
N	Meśra	297	300	3	26	11	19.1	6.4
	end of dynasty		352					
	total			243	3580	1125	3212.1	13.2

Table 3.13 Approximate annual die use at Kushan gold mints (estimates based on the formula proposed by Esty 2011, 46)

subsidiary mint rapidly fell into the SG 13–14 (*c.* 50–60% gold) range that would come to be the standard for gold coinage in the next 50 or so years under the Kidarites, though the main mint was able to maintain a standard of SG 14.3 (*c.* 62.5% gold) despite this pressure.

Copper coinage can be attributed to the period of Shaka because a distinctive group of late Kushan copper coins (L.C1-i) were issued with a weight standard of *c.* 3g, which was below the standard used under Vasudeva II. The series may have begun under Mahi and continued into Shaka's reign. The series all have a large Brahmi control mark on the obverse and an enthroned Ardochsho reverse. A similar series without the Brahmi marks (L.C1-ii) can be attributed to the same period. Copper coins with Oesho and bull reverses (L.C2-i), but the same weight standard appear to be from a separate mint. In the excavations at Taxila only two examples of Shaka's copper coinage were discovered, both Ardochsho reverse type without Brahmi marks, suggesting that this type could be attributed to a mint in Taxila.

M.1 Kipunadha, thirteenth Kushan ruler, c. AD 342–52: the last Kushan king (Figs 3.75–3.77)

The last Kushan king is only known from his coins, issued in succession to Shaka. His name is written as a Brahmi monogram in the right field of his coins. There are no significant traces of a Bactrian inscription.

Only one of Shaka's mints survived the transition into Kipunadha's reign. The distinctive features of king with closed hand and the double upright throne of Ardochsho show that it was Shaka's subsidiary mint that continued and acted as Kipunadha's sole gold mint (M.G1). The coinage was issued in two phases, distinguished by the Brahmi monograms under the king's left arm: *bhadra* (M.G1-i), followed by *bāsata* (M.G1-ii). The sequence is confirmed by the progressive degeneration of the gold quality. At the beginning of the reign the standard of SG 13.5 (*c.* 54% gold) from the previous reign was maintained during the use of the *bhadra* mark, but from the introduction of the *bāsata* mark it gradually dropped until there was virtually no gold in the alloy used to strike the coins.

A group of copper coins in Kushan style, but with no distinguishing control marks have been recorded which are lighter, *c.* 2.5g, than the coins assigned to Shaka, so here they are attributed to Kipunadha (M.C1-i).

Several groups of sub-Kushan copper coins follow on from Kipunadha's issues, but in some respects retain elements of the official Kushan designs. One group (M-imit. C1-i) is known primarily from a hoard found near Bhuj in Gujarat (Rajgor 1991). These freely mix designs drawn from Kushan, Kidarite and Kushanshah prototypes, often with no regard for whether the original design was the obverse or reverse, and may not represent a single production centre. Coins of this type have been found along with types directly imitating Kipunadha (M-imit.C3-i), but thinner and lighter, in a hoard found near Hund (Cribb 1981b) and in the excavations at Taxila (Marshall 1951, 828–9, nos 342–3, 347–9, 353–4 and 357). This group is more uniform in its designs and has been reported from Kashmir Smast (Khan *et al.* 2008, 62–6, nos 98–128) in quantity and formed the bulk of the hoard found near Hund, where it was mixed with very light imitations of Shapur II's Kushano-Sasanian style copper coins and examples of other light sub-Kushan coins (Cribb 1981b). The imitation Shapur II coins suggest a post-Kushan date for this hoard. Their low weight standard and their Kashmir Smast context suggests that they represent a local issue of the Kidarite Huns (O.C1). A third group (M.imit.C2-i) which combine a Kushan or Kushanshah design with a wheel design may represent unofficial copies near to the Kushan border with Panchala or one of the Gangetic states, or possibly the issues of a minor statelet which existed briefly in the wake of the final collapse of Kushan power.

O–Q Coinage of the Kidarite Huns (Figs 3.78–3.79)

A large series of Kushan-style coins linked by their design features and their denomination system with the issues of the

Figure 3.75 Gold coinage of Kipunadha, gold mint, locations unknown (M.G1)
Gold dinars were issued during the reign of the last Kushan king Kipunadha from a single mint in two phases, weighing *c.* 7.8g. This was the same mint as had played the subsidiary role under Shaka (L.G2). The phases are distinguished by changes in style and by their Brahmi inscriptions. The second phase included many debased coins as the reduction in gold purity became sufficient to change the colour of the coins.
a) dinar of first phase, with Brahmi monograms *kipunadha* and *bhadra* (M.G1-i: 3516 IOC.563, 7.72g, 17mm)
b–c) dinars of second phase, with Brahmi monograms *kipunadha* and *basata* and control mark *na*, the second coin showing the visible debasement of the gold in this phase (M.G1-ii: 3531 IOC.565, 7.31g, 17mm; 3532 1890,1104.1, 7.22g, 18mm)

Figure 3.76 Copper coinage of Kipunadha, copper mint, location unknown (M.C1)
Copper coinage was issued during the reign of Kipunadha from a single mint, as units of *c.* 2.5g. In spite of the poor striking, the official nature of this coinage is indicated by the high quality and detail of the engraving
a–c) copper units, several examples to show the standing king and enthroned Ardochsho designs, which are often struck off the edge of the flan (M.C1-i: 3545 1994,0707.16, 2.69g, 15mm; 3549 1994,0707.3, 2.34g, 17mm; 3568 1994,0707.15, 1.65g, 14mm)

last Kushan king Kipunadha represent the collapse of Kushan power. Their inscriptions link them with the Kidarite Huns and the last issue of the series features the name of Kidara whose name provided the ancient designation 'Kidarite Huns'. As on the late Kushan coins, the rulers are named on their coins through Brahmi monograms. They are sequenced through their use of control marks and minor changes in the treatment of the Kushan design (**Table 3.14**). This series seems to have been made specifically for currency in Gandhara and most of the coins of the first Kidarite rulers have the name of this region in a Brahmi monogram *gadahara*, i.e. Gandhara, inscribed in their right field.

The same rulers and various subordinates and successors were responsible for other coin series based on Kushan gold and copper, Sasanian-style silver drachms, and Kushano-Sasanian style gold dinars and copper coins. The Sasanian-style silver drachms and Kushan and Sasanian-style copper coins were issued for Gandhara to circulate alongside the Kushan-style gold dinars. These have been listed in various publications (Cribb 2010; Errington 2010; Pfisterer 2013; Vondrovec 2014) so have not been covered in depth here. The Kidarite Huns' Kushano-Sasanian style coins can be linked to the Gandharan coins through shared features; they are detailed later in the catalogue and will be discussed in the sections on late Kushano-Sasanian coins (see §Y-O.1–Y-Q.1 below) and Kidarite Hun coins in Bactria (§Z.1). The Kushano-Sasanian and Sasanian-style coins will only be referred to here in order to show their broader context.

Figure 3.77 Copper imitation coinage after the reign of Kipunadha (M-imit.C1–C3)
Copper coinages were issued after the end of Kipunadha's reign reusing the designs of Kushan coins or imitations of Kushan coins. Examples have been found in Gandhara, the Punjab and Sind and probably represent a variety of large and small scale productions, some probably by small successor states. They are divided here into three groups based on the general character of their design.
a) example with standing king on the obverse and straight lines on the reverse (M-imit.C1-i: 3577 1981,0736.10, 2.27g, 11mm)
b) example with enthroned Ardochsho on the obverse and straight lines on the reverse (M-imit.C1-i: 3588 1994,0707.29, 2.22g, 13mm)
c) example with enthroned Ardochsho on the obverse and a chakra on the reverse (M-imit.C2-i: 3592 1981,0120.24, 2.63g, 15mm)
d) example with standing king on the obverse and enthroned Ardochsho on the reverse, Gandharan series, perhaps a Kidarite issue (see also O.C1) (M-imit.C3-i: 3646 1980,1004.91, 0.67g, 11mm)

The complexity of Kidarite Hun issues reflects the usual pattern of coinage issued by invaders, retaining features of earlier coinage and gradually innovating as their rule stabilised, in the same way as was done at the beginning of the Kushan conquest of coin-using regions south of the Hindu Kush (see §A–B above; Cribb 2007b, 334–5, 362–6). Their two main influences were the Kushan coinages of Gandhara and the Kushan-derived Kushano-Sasanian coinages of Bactria. A third influence was the silver coinages being issued by the Sasanian emperors Shapur II, Ardashir III and Shapur III in the Kabul region. Their copper and silver coinages in the Gandhara region reflect Sasanian influence, but also feature their own gradual transformation of their Sasanian prototypes, such as the introduction of distinctive frontal portraits. The patterns of their production of the Kushan and Kushano-Sasanian style coins followed that of their predecessors, with one mint in Bactria and two in Gandhara striking gold coins and a copper mint in Bactria. The production of their silver Sasanian-inspired coins followed a different pattern and they appear to have made coins at five different mints (Cribb 2010) to create a new coinage of a type which had not circulated in Gandhara before. A large number of mints for a novel coinage might be necessitated by the need to establish them as a circulating currency quickly. The production of copper coins in Gandhara remains to be understood. Until the publication of large quantities of them by Khan *et al.* (2008) and Vondrovec (2014), Kidarite copper coins were almost unknown. Although they have now been classified, their production systems are still unclear and await further hoards and archaeology. The copper coins utilise both Sasanian and Kushan design but also innovate in surprising ways. Their denomination system seems to match the end of the Kushan copper coinage current in Gandhara, with very light copper units (*c.* 2–1g), struck on round or square flans.

The gold coinage continues the Kushan control mark system with the king's name written as a vertical Brahmi monogram in the field, and other letters and monograms representing the control system of the mint. The system suggests that there are two gold mints in production until a single mint produces coins for the third king Kidara. Kidara's coinage is immense and continues into a

Table 3.14 The succession of Brahmi monograms on Kidarite Kushan-style gold to the beginning of Kidara's reign

First gold mint						Second gold mint				
	under arm	by altar		right	reverse		under arm	by altar	right	reverse
O.G1-i	*yosa*		Na	kirada		O.G2-i	*haṇaka*	*kapana*	*shahi*	*bandya*
O.G1-ii	*kirada*	*kapana*	*Na*	*gadahara*		O.G2-ii	*yasada*	*kapana*	*gadahara*	*naṃda*
	kirada	*kapana*	*Ma*	*gadahara*		O.G2-iii	*kirada*	*kapana*	*gadahara*	*yasha*
	kirada	*kapana*	*Tho*	*gadahara*			*kirada*	*kapana*	*gadahara*	*naṃ*
P.G1-i	*peroysa*	*kapana*	*Pa*	*gadahara*	*naṃda*	P.G2-i	*perosya*	*kapana*	*gadahara*	*naṃda*
P.G1-ii	*peroysa*	*kapana*	*naṃ*	*gadahara*		P.G2-ii	*perosya*	*kapana*	*gadahara*	*ṣa*
						Q.G1-i	*kidara*	*kapana*	*kuṣaṇa*	*ṣa*
							kidara	*kapana*	*kuṣaṇa*	*ala*

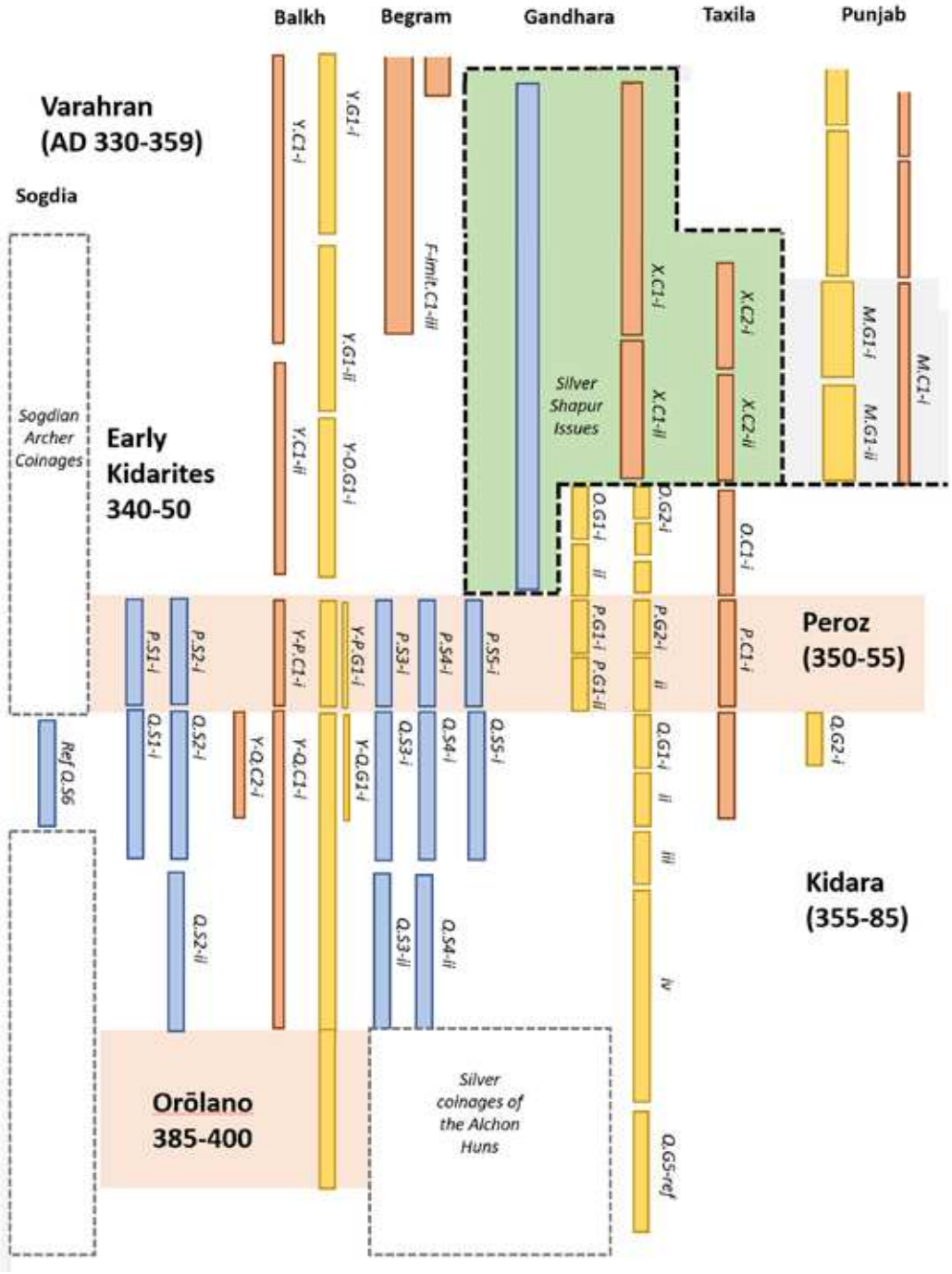


Figure 3.78 Production diagram
Mints operated under the Kidarites

degenerate series of imitations, often very debased. There are later series of coins issued in Kashmir and the Punjab after the period of the Kidarite Huns which continue to use the Kidarite designs and the name Kidara, but with other names added for the actual issuers (Cribb 2016b; Cribb and Singh 2017; Deyell 2016; 2017).

O.1 Kirada, first Kidarite ruler, c. AD 345–50 (Fig. 3.80)

The first coins which can be assigned to the Kidarite Huns in Gandhara have designs which are based on the last phase of Kipunadha's coins, sharing with them stylistic features: the form of the diadem ribbons worn by the kings, the double upright throne and laddered diadem ribbons of Ardochsho and the Brahmi *na* control mark by the altar. All the coins of this series have the name Kirada in a Brahmi monogram *kirada*, except for two coin types which are inscribed with Brahmi vertical monograms, respectively with the name Hanaka (*haṇaka*), and Yasada (*yasada*).

There appear to be two mints making Kirada's coins, distinguished by their use of control marks. One mint continues the use of the Brahmi control mark *na*, by the king's right leg, introduced under Kipunadha and then replaces it with others. The first issue (O.G1-i) represents the ruler with *kirada* in the same right-field position as on Kushan coins. Under the king's arm is the Brahmi monogram *yosa*. Unlike all the other Kidarite gold coins the

Figure 3.79 Gandharan coinage of Kidarite Huns (O–Q)
Gold, silver and copper coins were issued in the Kidarite period from many different mints representing a range of different overlapping monetary systems. In Gandhara gold coins were issued following Kushan practice (a), silver coins based on those of the Sasanians (b) and copper based on the widely circulating very small units of the region (c). In Tokharistan/Bactria gold and copper coins were made following Kushanshah practice (Y-O. G1 and C1 to Y-Q.G1 and C1). This section focuses primarily on the gold issues with designs deriving from last Kushan king Kipunadha. Samples of Sasanian style silver coins and the local copper coins are illustrated from the British Museum collection.
a) Kushan style gold dinar in the name of the Kidarite king Kirada, with Brahmi monograms *gadahara*, *kirada*, *kapana* on the obverse and *yaṣa* on the reverse (O.G2-ii: 3678 1894,0506.192, 7.76g, 19mm)
b) Sasanian style silver drachm of Kidarite king Kidara, inscribed in Brahmi kidara *kuṣana ṣa* on the obverse and *alakha* on the reverse (Q.S3-i: 3774 1894,0506.1402, 3.52g, 27mm)
c) Sasanian/Kushan style copper unit of Kidarite king Peroz, inscribed in Brahmi *gada-hara* on reverse (P.C1: 3688 1991,0640.12, 1.62g, 20mm)

ruler is shown on this type with a beard, wearing Sasanian-style dress (a long-sleeved tunic with a rounded hem) and a crescent on his brow. The second issue (O.G1-ii) moves Kirada's name to the under-arm position and puts the name of the Gandhara region *gadahara* in the right field. There are three varieties, one of which retains the *na* mark by the king's leg, the other two replace it with other marks: *ma* and *tho*; all three have a Brahmi monogram *kapana* between it and the altar. The other mint (O.G2-ii) also adds *gadahara* in the right field and a Brahmi control mark on the reverse in the right field, but omits the *na* and other marks between the king's leg and the monogram *kapana*. The coinage begins with the issues with the names Hanaka (O.G2-i) and Yasada (O.G2-ii), but the remaining coins use the name Kirada (O.G2-iii).

Kushano-Sasanian style Bactrian gold coins in the name of Varahran with the Kidarite tamga (Y-O.G1) can be assigned to the period of Kirada as the tamga appears on the second series of Varahran coins three issues before the appearance of the name Kidara on these coins. In Gandhara, coins with the name Peroz, associated with the second of the Bactrian Kidarite tamga issues, are placed between those in the name of Kirada and those naming Kidara.

Small copper coins based on Kushan designs (O.C1-i) circulated in Gandhara during the Kidarite period; some can be assigned to specific rulers, but most have local sub-rulers' names which do not appear on the Kidarite gold or silver coins.

Alongside the Bactrian gold coins with the Kidarite tamga small copper coins in the Kushano-Sasanian style (Y.C1) continued to be made, but those with the first crown and name of Varahran cannot be separated between Kushano-Sasanian and Kidarite issues.

There are no silver Kidarite coins which can be assigned to Kirada's reign.

Figure 3.80 Gold coinage of Kidarite Hun Kirada (O.G2)
Kushan style gold coins were issued throughout the reign of Kirada from two mints (O.G1 and G2), the first in two phases, the second in three, as dinars of *c.* 7.8g. These early Kidarite Hun coins are only known in modest numbers so only the second phase of the first mint and the third phase of the second are illustrated. The mints and phases are distinguished by the Brahmi monograms and control marks.
a) dinar of first mint, second phase, with Brahmi monograms *gadahara* and *kirada* and *ma* control mark on the obverse (O.G1-ii: 3671 IOC.570, 7.76g, 18mm)
b) dinar of second mint, third phase with Brahmi monograms *gadahara*, *kirada*, *kapana* on the obverse and *yaṣa* control mark on the reverse (O.G2-ii: 3672 1894,0506.193, 7.6g, 19mm)

Figure 3.81 Gold coinage of Kidarite Hun Peroz (P.G2)
Kushan style gold coins were issued throughout the reign of Piruz from two mints, both in two phases, as dinars, *c.* 7.8g. As with Kirada issues the mints and phases are distinguished by Brahmi monograms and control marks and the types are represented by only a few examples. Only the second phase of the second mint is illustrated here.
a) dinar of second mint, second phase, with Brahmi monograms *gadahara*, *peroysa*, *kapana* on the obverse and *ṣa* control mark on the reverse (P.G2-ii: 3682 1917,1001.1, 7.66g, 21mm)

P.1 Peroz, second Kidarite ruler, c. AD 350–5 (Figs 3.81–3.82)

The two Kidarite Gandharan gold mints follow the issues of Kirada with coins in the name of Peroz, written as a Brahmi monogram *peroysa* under the king's arm. The position of Peroz's coins fall between those of Kirada and Kidara because Peroz's coins were struck on flans with different diameters, *c.* 18mm like Kirada's coins and *c.* 20mm like Kidara's coins.

As under Kirada the mints are distinguished by their use of control marks, with a mark by the king's right leg on the obverse at one (P.G1) but not the other (P.G2) and divided into phases by the other control marks used.

An issue of copper coins in Gandhara (P.C1) features the king's name in Brahmi *pero-ysa* (Cribb 2010, 138, 145, no. 66) on some varieties and *gada-hara* on others (*ibid.*, 138, 145, no. 65). It seems to be a large issue with over 30 examples published (Khan *et al.* 2008, 104–6, nos 185–94; Vondrovec 2014, 93–4, type 2A). The inscription is on either side of an image of Ardochsho seated on the back of a lion on the reverse. The obverse has a Sasanian-style bust facing right, wearing a ram's horn crown. Gandharan silver coins with the same obverse design are also known with a blundered version of the name Peroz in Pahlavi (Cribb 2010, 138, 143, no. 43; Vondrovec 2014, 53, 54, types 1A and 1B) or without inscription (Vondrovec 2014, 52, type 1). On the reverse of some of the silver coins there is a Brahmi inscription *nandaya* or *naṃ*, versions of the Brahmi control marks on the reverse of gold coins at both mints.

A bust with ram's horn crown also appears on Sasanian-style coins of three other silver mints in Gandhara and on Kushano-Sasanian style gold and copper coins from the Balkh mint. One silver mint struck coins with a horned crown facing bust and Brahmi inscription *peroysa ṣa* on the obverse and *naṃ* on the reverse (Cribb 2010, 138, 144, no. 51; Vondrovec 2014, 55, type 3). Another facing bust type is without inscription (Cribb 2010, 138, 143, no. 41; Vondrovec 2014, 56, type 3A). The third mint has a profile bust with the Brahmi letter *pe* on the obverse together with a Pahlavi inscription naming the Kushano-Sasanian Kushanshah Varahran, and *naṃ* on the reverse (Cribb 2010, 137, 145, no. 41; Vondrovec 2014, 31, type 5).

The Bactrian gold coins of Peroz (Y-P.G1) retain the inscription of Kushano-Sasanian Kushanshah Varahran but have the ram's horn crown as on the Gandharan coins inscribed with Peroz's name. On one variety Peroz's initial in Brahmi *pe* is in the right field. The Bactrian copper coins (Y-P.C1) showing the king wearing a ram's horn crown are inscribed (in Pahlavi) with Varahran's name and title, but should be issues of Peroz.

Q.1 Kidara, third Kidarite ruler: first Hun Kushanshah, c. AD 355–85 (Figs 3.83–3.88)

Gandharan gold coins in the name of Kidara follow those of Peroz. His name appears as a Brahmi monogram *kidara*, and in place of the monogram *gadahara* is a Brahmi monogram of *kuṣaṇa*, an indication of his adoption of the title Kushanshah, paralleled on his Bactrian gold coins.

The production of Gandharan gold coins appears to be consolidated into a single mint (Q.G1), the second mint which began under Kirada with Hanaka and Yasada issues (O.G2) and continued under Peroz (P.G2). This mint follows on from Peroz's issues, on the basis that it shares the same reverse mark Brahmi *ṣa* as the last issue of Peroz's reign (P.

Figure 3.82 Silver coinage of Kidarite Hun Peroz (P.S1–S5)
Silver coins in Sasanian style were issued in the reign of Peroz from five mints, all located in Gandhara. The mints are distinguished by portrait, control mark and inscription, but only three are represented in the British Museum collection.
a) drachm of the mint A distinguished by Pahlavi inscription naming Varahran, and Brahmi *pe* on obverse and *naṃ* control mark on reverse (P.S1-i: 3683 1860,1220.245, 3.94g, 30mm)
b) drachm of mint B distinguished by single horn crown and lack of inscriptions (P.S2-i: 3684 1985,0223.143, 3.55g, 29mm)
c) drachm of mint E with Bactrian inscription ΠΙΡΟΖΟ ÞΑΟ (P.S5-i: 3686 1991,0638.1, 4.02g, 26mm)

G2-ii). The attribution to this mint is also indicated by the absence of the control mark, such as *naṃ* (P.G1-ii) on the obverse, which distinguished the first gold mint in the previous reigns. In the second phase the reverse mark was changed to *ala* (Q.G1-ii), perhaps a reference to the Alchon Huns who succeeded the Kidarites in control of Gandhara, and this became a fixed feature of Kidara's Kushan-style gold coinage. Shortly after the introduction of the *ala* monogram a rosette control mark (Q.G1-iii) was added to the obverse between the king's right leg and the *kapana* monogram. The coinage continues through phases of debasement (Q.G1-iii) and degenerate designs (Q.G1-iv).

Copper coins with a bust wearing the same petalled crown with raised ribbons design as worn by Kidara on his Bactrian coins were issued in Gandhara (Q.C1). On their reverse some feature the Kidarite tamga as featured on Kidarite Kushano-Sasanian style coins minted in Bactria (Khan *et al.* 2008, 107–9, nos 196–207; Cribb 2010, 138, 145, no. 67; Vondrovec 2014, 83–6, type GC-K3). Other issues with the same crown have Ardochsho on lion (Khan *et al.* 2008, 109–10, nos 207–16; Vondrovec 2014, 79–80, type GC-K1), as on Peroz's coppers, or an enthroned Ardochsho (Khan *et al.* 2008, 113, no. 113; Cribb 2010, 138, 145, no. 68). A facing bust type with the crown has a single Brahmi character *ṣa* as its reverse, perhaps

Figure 3.83 Gold coinage of Kidarite Hun Kidara (Q.G1)
Kushan style gold coins were issued through the reign of Kidara and posthumously from a single mint, in four phases, as dinars, *c.* 7.8–8g. The coins retain the types, king and Ardochsho, of earlier issues, and all feature the king's name in a Brahmi monogram kidara under the king's arm, but become noticeably more stylised and debased over time, with the final phase being almost entirely debased. The weight of these coins seems to return to the theoretical *c.* 8g of the early Kushan dinar from the 7.8g standard those coins had fallen to in the late 3rd century AD.
a–d) dinars of first, second, third and fourth phases, Brahmi monograms *kidara*, *kuṣaṇa* and *kapana* on obverse and *ala* on reverse, showing degredation of style and progressive debasement (Q.G1-i–iv: 3690 1860,1220.227, 7.82g, 22mm; 3692 OR.360, 7.84g, 21mm; 3709 1850,0305.202, 7.94g, 23mm; 3730 1922,0424.3032, 4.94g, 22mm)

Figure 3.84 Gold coinage of Kidarite Hun Kidara in name of Samudragupta (Q.G2)
Gold coins in the name of the Indian king Samudra(gupta) were issued from a subsidiary mint (Q.G2) in the reign of Kidara in a single phase as dinars, *c.* 7.5g. The basic type of these coins, standing king and Ardochsho, derives from Kushan types, but the style of the obverse is entirely original and shows a ruler wearing the crown of Kidara.
a) dinar inscribed with Brahmi monograms *gadakhara* and *samudra* and a control mark *pu* (Q.G2-i: 3734 1894,0506.184, 7.51g, 17mm)

Figure 3.85 Gold coinage of successors of Kidara in the Punjab (Q.G3-ref)
Gold coins with the name of Kidara were issued by his successors in the Punjab as dinars, *c.* 8g. The name under the king's arm is still Kidara but an additional royal name in Brahmi is added on the reverse to the right of the goddess, and new control marks on the obverse.
a) dinar with the name Kupama, with Brahmi control mark *bāśu* (Q.G3-ref 1A/1a: 3735 1921,0308.1, 7.99g, 21mm)
b) dinar with the name Kritavirya, with Brahmi control mark *rvva* (Q.G3-ref 2A/1b: 3726 1894,0506.142, 7.85g, 22mm)
c) dinar with the name Salonavirya, with Brahmi control mark *avam* (Q.G3-ref 3A/1c: 3747 1894,0506.197, 7.85g, 18mm)
d) dinar with the name Visvama, with Brahmi control mark *iśa* (Q.G3-ref 4A/1d: 3753 IOC.555, 7.62g, 22mm)

paralleling the use of this character as a control mark on the first phase of Kidara's Kushan-style gold coins (Q.G1-i).

One Gandharan copper coin type, with an illegible Bactrian inscription, is in the style of southern Kushano-Sasanian issues (Y-Q.C2; Cribb 2010, 138, 145, no. 70) based on the coins of Shapur II, but with the bust wearing the raised ribbon flowered flat crown used on the Bactrian gold coins of Kidara in the name of Varahran.

There are several Gandharan silver coin types showing the ruler wearing the crown associated with the name of Kidara on his Bactrian coins. Two series retain the name of the Kushanshah Varahran: one with a profile bust inscribed in Pahlavi *kdy wrhr'n kwš'n MLKA* (Q.S1) (Cribb 2010, 138, 143, 42; Vondrovec 2014, 57–9, types 8, 9 and 10) and on the reverse has the Brahmi inscription *nanda*, *nandaya* or *nandaka*; the other with a facing bust inscribed in Brahmi *vara ṣa*[*ha*] (Q.S4-i; Cribb 2010, 138, 144, 54; Vondrovec 2014, 67, type 16). The other types have Kidara's own name and Kushanshah title in Brahmi *kidara kuṣana ṣa* with a facing bust (Q.S3-i; Cribb 2010, 138, 143, 49; Vondrovec 2014, 60–1, type 11) and *kidara kuṣana ṣa*[*ha*] with a profile bust (Q.S2-i; Cribb 2010, 138, 143, 45; Vondrovec 2014, 64–5, type 14); with a variation in the crown form replacing florets with crenellations. The facing bust variety (Q.S3-i) is inscribed

Figure 3.86 Silver coinage of Kidarite Hun Kidara and successors (Q.S1–S5)
Silver coins in Sasanian style were issued in the reign of Kidara and his successors from five mints, all located in Gandhara, some employing multiple phases of production, as drachms of *c.* 3.5g. The mints are distinguished by the portrait, crowns and inscriptions. Only a selection are illustrated here.
a) drachm of mint A in name of Varahran Kushanshah in Pahlavi, with Kidara's crown, with Brahmi *nandaya* on reverse (Q.S1-i: 3756 1923,0303.1, 3.49g, 31mm)
b) drachm of mint B, first phase, with Kidara's crown, with Brahmi inscription *kidara kuṣaṇa ṣa* on obverse and *ṣa* on the reverse (Q.S2-i: 3770 1939,0108.1, 3.65g, 30mm)
c) drachm of mint B, second phase, with Kidara's crown, without inscription on obverse and illegible Pahlavi on the reverse (Q.S2-ii: 3772 1939,0108.2, 3.86g, 29mm)
d) drachm of mint C, with Brahmi inscription *kidara kuṣana ṣa* on the obverse and *alakha* on the reverse (Q.S3-i: 3774 1894,0506.1402, 3.52g, 27mm)
e) drachm of mint C, with winged crown without inscription on obverse and Brahmi *buddhami* on the reverse (Q.S3-ii: 3777 IOC.544, 3.58g, 27mm)
f) drachm of mint D, first phase (Q.S4-i: 3779 1894,0506.139, 3.53g, 28mm)
g) drachm of mint D, second phase (Q.S4-ii: 3782 1922,0424.3820, 3.86g, 24mm)
h) drachm of mint E (Q.S5-i: 3784 1922,0424.3821, 3.67g, 25mm)
i) silver drachm of unidentified mint in the name of Varahran Kushanshah but with bust of Kidara (a newly discovered attribution; Göbl 1967, type 22), inscribed in Pahlavi: *wrhrʾn* RBA on the obverse and *[k]wšʾn MLKA* on the reverse (1894.0506.1297, 3.76g, 18mm)

Figure 3.87 Copper coinage of Kidarite Hun Kidara (Q.C-ref)
A lot of copper coins attributable to the Kidarite period have been discovered over the last two decades (Khan *et al.* 2008; Vondrovec 2014), mostly anonymous or in the name of local sub-rulers, but some show the portrait of Kidarite rulers. Only one example of Peroz (P.C1) and one of Kidara are in the British Museum collection. The Kidara example has a front portrait like his silver coins (Q.S2 and S3), but wearing the crown used on his Kushano-Sasanian style gold coins (Z.G1-i) and the control mark on the back of his Kushan style gold coins (Q.G1-i).
a) unit with facing bust of Kidara and Brahmi *ṣa* on the reverse (Q.C-ref: 3792 1921,0331.50, 0.84g, 12mm)

Figure 3.88 Samarkand silver coinage of Kidarite Hun Kidara (Q.S6)
Silver coins were issued in Samarkand in the name of Kidara, written in Sogdian script, adapting the local bust and archer type.
a) obol inscribed in Sogdian *kydr* (Q.S6: 3790 1946,1103.4, 0.32g, 12mm)

alakha in Brahmi on the reverse, perhaps another reference to the Alchon Huns.

The Bactrian gold coinage of Kidara began with issues bearing the name Varahran Kushanshah in Bactrian (Y-Q. G1). The headdress, a flat ornamented crown with petals and, later, florets, was surmounted by two raised ribbons flanking a central hair ball. After the first varieties in the name of Varahran an issue followed in the name of Kidara as Kushanshah (Z.G1). This new coinage had a rosette design like his Gandharan issues and on some issues a Brahmi *ba* or Pahlavi *bl* appeared in the right field of the obverse, probably references to their issue at the mint of Balkh.

Although the transition from acknowledgement of the Kushano-Sasanian ruler Varahran to naming himself as Kushanshah is uneven, the direct relationship between the Gandharan and Bactrian issues is clear.

In Bactria further Kidarite rulers are named on the coins as the successors of Kidara as Kushanshah; they are not named on the Gandharan coins. The Kidara-style Gandharan silver and copper mention other rulers, but without any indication of their status. Pfisterer has shown how some of their crowns relate to Alchon types, so they could be part of the Alchon Hun group which succeeded Kidara (Pfisterer 2013, 32–52; see Ch. 2 §Y–Z.1).

A small silver coin outside the Kushan and related series also bears the name of Kidara, but written in Sogdian: *kydr* (Zeymal 1996b; Naymark 1991, 159–61; see Ch. 2 §Y–Z.1). It is an issue of the Samarkand region archer series.

Q.2 Kidara: Samudragupta's Kidarite issue

At the end of the Kushan gold series in Gandhara there is an issue of gold coins inscribed with the name *samudra* as a Brahmi monogram under the king's left arm together with Gandhara written in Brahmi *gadagra* or *gadakhra* in the right field (Q.G3-i). The position and form of the king's name is the same as that used on the Gupta king Samudragupta's regular Indian issues, so it seems likely that they were issued in his name. The nature of the inscriptions also corresponds with the Kidarite series, especially the position of the king's name and of Gandhara (even though with a slightly different spelling).

The connection with the Kidarites is further made by the treatment of the trident over the altar on the obverse and the king's headdress. The crescent on top of the trident and its exaggerated ribbons are identical to the treatment of the trident on Kushano-Sasanian coins since the reign of Hormizd I, a feature continued by the Kidarite issues. The king's headdress is a simplified copy of the raised ribbons headdress worn by Kidara on his Bactrian gold coins (Y-Q. G1-i, Z.G1-i). Their size (diameter *c.* 18mm), however, links them more closely to the early Kidarite period and the only hoard containing them showed them deposited with Kipunadha coins (Mitchiner 1975).

Q.3 Kidara: the survival of the name Kidara in later coin inscriptions

The gold coins issued in Gandhara in the name of Kidara were issued in large numbers and appear to have been followed by a long series of imitations of gradually reducing gold content (Cribb 2016b; Deyell 2016; 2017). Their widespread circulation prompted many later kings to use the same design retaining the *kidara* inscription long after Kidara had died.

The earliest series of copies were issued in the Punjab by kings who added their names, Kuṣama, Kritavirya, Saloṇavirya and Visvama, to the design in place of the *ala* inscription on the reverse and adding different Brahmi control marks on the obverse between the king's right leg and the altar (Q.G5). The series can be placed in the 5th century as a Kritavirya coin was found in the Tope Kelan votive deposit at Hadda datable by the Sasanian coins with it to *c.* AD 480 (Errington and Curtis 2007, 93). A later series, with a cruder version of the Kidara design, featuring kings called Mahendra, Narendra and Pratapa, is followed by another featuring kings called Yaśovarman, Vigrahatuṇga, Durlabhadeva, Vinayāditya and Nrodvihakṣa or Namviharṣa. Further evidence of their dating is available from a votive deposit at Manikyala in the Punjab which included a coin of Yaśovarman together with an Arab coin from Merv dated AD 685 (Errington and Cribb 1992, 183–5; Cribb 2016b; Deyell 2017).

A similar series of imitations of Kidara coins was also current in Kashmir, with early issues adding the *śrī ṣahi* title used by Hun kings. One Kashmir issue has the name Prakaśa which appears to be a contraction of *prakaśāditya*, the name used by the Hun king Toramana (*c.* AD 485–515) on his coins issued in India (Tandon 2015). It was followed by the last issue to feature Kidara's designs, inscribed with the name of the Kashmir king Pravarasena. After this a new series of Kashmir gold coins, drawing their designs from Gupta coinage but still featuring the name of Kidara on their reverses, were issued in the names of 6th to 7th-century

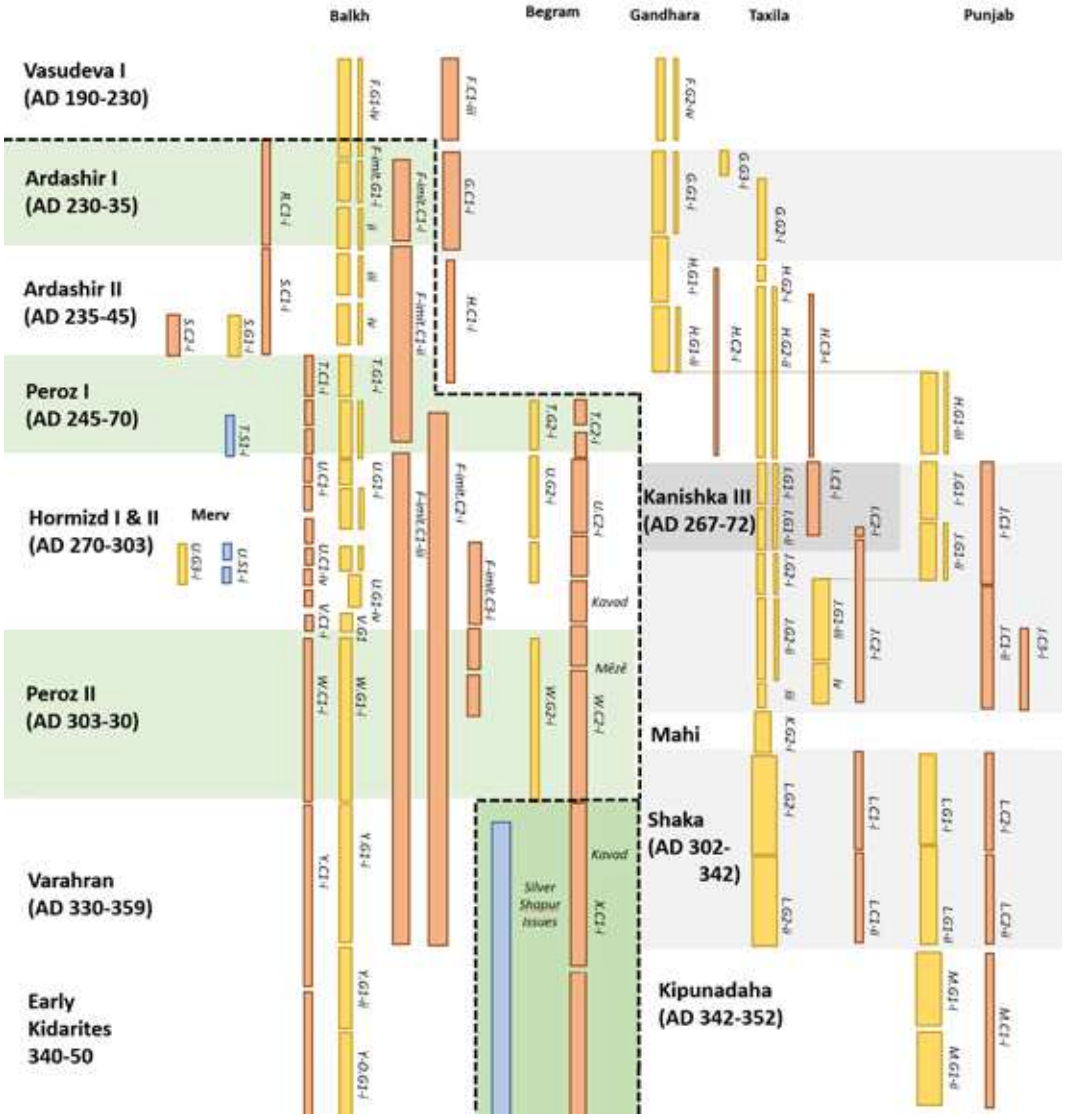


Figure 3.89 Production diagram
Minting diagram showing the development of Kushanshah coinage after the reign of the Kushan Emperor Vasudeva I

Kashmir kings: Pravarasena, Meghavahana, Tujhina (Tuysina) and Toramana II (Cribb 2016b).

R–Y Kushano-Sasanian coinage (Fig. 3.89)

In the reign of the Kushan king Kanishka II (see §G.1 above and Ch. 2 §G.1), the recently founded Sasanian empire invaded Kushan territory and began new coinages based on a mixture of Kushan types and their own coin imagery. The invasion was in two main stages and the coinages initiated at each stage were different and intended to circulate in different areas. The invasion began in Bactria/Tokharistan and the resulting coinage was made to circulate in that area. When Kushan territory south of the Hindu Kush came under Sasanian rule a different coinage was made for circulation there and in the territories later captured from the Kushans further east beyond the Khyber Pass. These coinages are commonly referred to in modern scholarship as Kushano-Sasanian or Kushanshah after the title appended to the king's name on most issues.

Soon after the first invasion the Sasanian emperor Ardashir I (AD 223–40), as Shahanshah, king of kings, appointed a local king, the Kushanshah, to rule the captured Kushan territory. This is in line with his practice in other areas he captured, as recorded in his son Shapur I's Kaʿba-ye Zardošt inscription (line 41) at Naqš-e Rustam, where it is stated Ardashir I appointed kings of Merv, Kerman, Sakastan and Nishapur (Huyse 1999, 54).

The first Kushanshah's name is not written clearly on his coins (R.C1-i), but the inscription seems to read *mzdysn bgy ʾrthštr y ʾrthštr kwsʾn MLKA mrwy MLKA*, making it clear that as well as Kushanshah he was also the Mervshah, so he is likely to be the Ardashir mentioned in Shapur I's inscription at Naqš-e Rustam, named as Ardashir king of Merv, appointed under the Sasanian emperor Ardashir I. Although it has been suggested that Ardashir Mervshah was the son of Ardashir I (Brunner 1974, 147), the reading of these coins offers the first evidence of that.

In al-Tabari's account of Ardashir I's conquests he is said to have led his army to Balkh and received submission from the Kushan king (al-Tabari, 5.819–20: Bosworth 1999, 15), and it seems likely that this is Vasudeva I or Kanishka II, rather than Ardashir's son the Kushanshah.

The date of Ardashir I's campaign into the east is problematic. Our most secure evidence is the loss of the

Figure 3.90 Copper coinage of Ardashir I Kushanshah (R.C1)
Copper coins were issued in the name of a king Ardashir with the title Kushanshah from Balkh in a single phase, as units of *c.* 3.3g. The bust of the king is Sasanian in style and the inscriptions are in Pahlavi. The reverse shows a type of investiture scene peculiar to Kushano-Sasanian coins, but as on Kushan coins the deity is labelled. These were not the only coins issued by the Kushanshah at this point, as they were contemporary with the imitation Kushan coins copying designs and inscriptions from Vasudeva I and Kanishka II (F-imit.G1 and C1).
a) copper unit naming Ardashir as son of Ardashir, Mervshah and Kushanshah, showing the king being invested by Anahita on the reverse (R.C1-i: 3796 1933,0315.4, 2.52g, 19mm)

Figure 3.91 Copper coinage of Ardashir II Kushanshah (S.C1)
Copper coins were issue in the name of a second king Ardashir from Balkh in a single phase as units of *c.* 3.3g. They are inscribed in Pahlavi and mix Sasanian with Kushan coin designs. There are several varieties distinguished by control marks before the king's face.
a) unit naming Ardashir Kushanshah, with the goddess Anahita on the reverse (S.C1-i: 3801 1995,0507.5, 2.32g, 19mm)

Balkh mint to the Sasanians. The mint's final phase (F.G1-v) shows a marked divergence in control system, die counts, and style with the subsidiary mint, and begins a long series (F-imit.G) which ends in issues of Kushanshah kings (see §F.3 above). It is therefore certain that the conquest either took place before Kanishka II came to the throne, or coincided (and perhaps caused) that event. Unfortunately Kanishka II's accession to the throne remains unclear, as the dates on inscriptions referring to him overlap those of Kanishka I making it uncertain which king any particular inscription is referring to. Some scholars assign an inscription in year 4 of the second Kushan century, i.e. *c.* AD 230/1 (Skinner 154) to this king (see ch.2 §G.2 for a fuller discussion). It must have been after Vasudeva I's year 98 (AD 223/4), the last extant dated inscription naming Vasudeva I (Skinner 151). Chinese evidence of an embassy from a Yuezhi (the usual Chinese designation for a Kushan) king *Botiao*, i.e. Vasudeva I, to the Wei court in China, arriving in AD 230, suggests Vasudeva was still on the throne when it was dispatched in AD 229 (Zürcher 1968, 371; Falk 2015a, 126). Had Vasudeva remained on the throne for any substantial time after that we would expect to have found inscriptions from Mathura with single digit dates. Alram has argued that Ardashir's campaigns in the east predate issues of coins from Ctesiphon which date to *c.* AD 226/7 (Alram 2007, 232–3) or fall within the period AD 233 to 235 when Ardashir was not in conflict with Rome (*ibid.*, 233).

This evidence suggests that the capture of Balkh and establishment of Kushano-Sasanian rule in Bactria took place before the end of Vasudeva I's reign, but probably after the embassy to China was sent. Various authors have suggested that Vasudeva I's embassy was sent as a bid by the Kushans to seek help from the Chinese against the Sasanian invasion, but the Chinese text gives no such indication, although it does imply a Chinese alliance with the Kushan king who was given the title *Qin Wei Da Yuezhi Wang* (Wei-loving Kushan king).

The chronology of the Kushano-Sasanian coinage, and the Kidarite coinage which imitated it, is much disputed and the structure laid out here is based on the numismatic sequences and links outlined elsewhere (Cribb 1981a; 1985c; 1990; 2010; 2018a), with adjustments for absolute chronology in earlier papers reflecting Falk's dating of the Kanishka I era to AD 127 (Falk 2001a).

The Paikuli inscription of the Sasanian emperor Narseh (AD 293–302/3) is the first non-numismatic mention of a Kushanshah, *kwšn MLKA* (section 92), but does not name him (Skjærvø 1983, 52). Apart from the likelihood that the first Kushanshah is the Ardashir Mervshah mentioned in Shapur I's inscription, two other Kushano-Sasanian kings are known by name from external sources. Graffiti in a cave at the site of Kara Tepe near Termez is thought by some to mention Sasanian Kushanshahs Peroz (I or II), Hormizd (could be I or II) and Varahran, but the readings of these as king's names (Harmatta 1974) are questionable (Davary 1982, 75–81). Varahran Kushanshah is however named in one of the Bactrian documents (Sims-Williams 2007, 52–3, document **ba**).

The Kushano-Sasanian period ended with the rise of the Kidarite Huns. The threat to the Sasanian empire prompted Shapur II (AD 309–79) to take over the southern part of the Kushano-Sasanian realm in the reign of the sixth Kushanshah Peroz II. The seventh and last Kushanshah Varahran continued to rule in Bactria/Tokharistan, but seems to have yielded control to the Kidarite Huns, retaining his throne in name only until the Kidarite ruler Kidara took over as the next Kushanshah.

R.1 Ardashir I, first Kushano-Sasanian ruler, c. AD 230–5 (Figs 3.90–3.92)

Only a single series of copper coins is known for this king (R.C1-i). His name is difficult to read on the surviving examples. The inscriptions are all written by an illiterate die engraver, who simplified the letter forms; a tentative reading of the inscription, based on several specimens could be, starting from about 7.00, *mzdysn bgy ʾrthštr y ʾrthštr – kws'n MLKA mrwy MLKA* (Mazda-worshipping Ardashir, son of Ardashir, Kushan king Merv king), but a better written specimen will be needed before such a reading can be confirmed or improved. The reading *kws'n MLKA mrwy MLKA* seems certain, as it is repeated more clearly on the reverse of this coin type as a label for the king. This king is identified by his profile bust wearing a crown adorned with a

Figure 3.92 Gold and copper coinage of Ardashir II Kushanshah (S.G1 and C1)
Gold and copper coins in the name of Ardashir were issued at a newly opened mint further south than Balkh with inscriptions in Bactrian and Kushan style designs, gold dinars weighing *c.* 8g, and copper units weighing *c.* 3.3g. The gold coins were issued in a single phase and the copper coins were issued in two phases distinguished by the form of the altar on the obverse and by a change in the use of control marks.
a) dinar in the name of Ardashir Kushanshah, with three dots and swastika under the king's right arm (S.G1-i: 3797 1986,0641.1, 8.02g, 22mm)
b) unit of first phase with same fire altar as the gold dinars and a swastika below the king' right arm (some examples have three dots below the king's left elbow) (S.C1-i: 3822 OR.9149, 4.14g, 19mm)
c) unit of second phase with fire altar in form of bird and three dots and a swastika below the king's right arm (S.C1-ii: 3827 OR.9153, 2.49g, 17mm)

winged bird-headed creature with a fish-like body, holding a diadem in its beak. The design on the reverse shows the king receiving the Kushan crown from the goddess Anahita, who is labelled in the inscription. The denomination, designs, inscriptions and fabric of the coins relates them more closely to Sasanian coinage than Kushan. On the basis of the king being identified as Kushanshah and their relationship to later Kushano-Sasanian issues, the coins seem to have been made at Balkh. A different coinage was issued at Merv by Ardashir (Loginov and Nikitin 1993a).

S.1 Ardashir (II?), second Kushano-Sasanian ruler, c. AD 235–45

Gold and copper coins were issued by this king. This king is identified by his tripartite (floriate or crenellated) crown with a central hair ball, and coin inscriptions name him and give him the title Kushanshah in Pahlavi on one series of coins: *mzdysn bgy 'rthštr RBA kwš'n MLKA* (Mazda-worshipping Ardashir great Kushan king), and in Bactrian on the other: ΒΑΓΟ ΑΡΔΑÞΟΡΟ [ΟΟΖΟΡΚΟ] ΚΟÞΑΝΟ ÞΑΟ (lord Ardashir [great] Kushan king). The treatment of designs reflects the work of Sasanian die engravers, but the reverse designs featuring a deity offering a diadem (to the king on the obverse) suggest Kushan influence. The title ΟΟΖΟΡΚΟ, the Bactrian word for great, is different to the Bactrian ΣΤΟΡΓΟ used by early Kushan kings to give themselves the same epithet (Sims-Williams and Cribb 1995–6) and was probably introduced as closer in sound to the Pahlavi word *wzwrg*.

As the Kushano-Sasanian kings are identified and distinguished on the basis of their coin designs and inscriptions (Göbl 1971, 6–7 and 12–13), one cannot rule out the possibility that this king and the first king are in reality the same person, who changed his identity, as represented by his crown type, midway through his reign. Until a legible example of the first king or new non-numismatic source appears, we cannot be certain.

One series (S.C1-i) seems to be a continuation of the activity of the copper mint started under his predecessor and has no parallel gold issues. The suggestion that this mint should be located in Merv is based on a misunderstanding of one of the symbols (S.C1-i, obverses 1A and 1B) in front of the face of the king (Schindel 2005, 228). The suggestion was that this symbol (symbols 1A and 1B in catalogue) should be read as Pahlavi *ml*, i.e. the first letters of Merv, following Carter (1985, 224–5) who had read it as *mr* with the same interpretation. This symbol is one of several placed in the field of this coin type, with some having no symbol. The shape of the symbol does not resemble either letter in the Pahlavi of the 3rd century, as *m* is a round, not triangular letter and *l/r* is normally written vertically, not as a horizontal stroke. If the symbol is writing, then it would be easier to explain it as Bactrian ΑΓ or Brahmi *e-ra*. One of the symbols (S.C1-i, obverse 2A, symbol 2) seems to be two Bactrian letters ΚΟ. The others (S.C1-i, obverses 3A, 3B, 3C, symbols 3, 4 and 5) do not match any of the local scripts. The position of this issue in the sequence of coins issued in Bactria and the absence of any indication of a mint name makes an attribution to Merv implausible. It is for this reason, however, and the copying of Kushano-Sasanian design by Shapur II for his copper coins issued at Merv that Schindel has misattributed this coin series and all later Bactrian issues of the Kushano-Sasanians to Merv ('Aus all den dargelegten Gründen glaube ich, daß die Neuzuweisung

Figure 3.93 Gold coinage of Peroz I Kushanshah, Balkh mint (T.G1)
Gold dinars and quarter dinars were issued during the reign of the Kushano-Sasanian ruler Peroz I at the Balkh mint in two phases. The dinar was struck to a standard of *c.* 7.9g dropping to *c.* 7.85g in the second phase. The phases are distinguished by the costume of the king and minor changes in design. These coins followed imitations of Kushan coinage (F-imit.G1) and were probably issued from the main mint, with the first phase retaining the depiction of a Kushan king as on the imitations, but the second phase introduced the king in Sasanian dress.
a) dinar of first phase, with Brahmi *pe* in obverse right field and Bactrian Z control mark under the god's left arm on the reverse. The Sasanian version of Oesho is now labelled the 'exalted/high god' (T.G1-i: 3828 1860,1220.220, 7.93g, 29mm)
b) dinar and quarter dinar of second phase, with new depiction of king in Sasanian dress, with Brahmi *pe* on the obverse (T.G1-ii: 3829 1890,1106.3, 7.82g, 29mm; 3843 1983,0729.42, 1.93g, 18mm)

der "westlichen" KS-Bronzen an die Münzstätte Merw als gesichert gelten kann' [For all these reasons I believe that the reallocation of the western K[ushano-]S[asanian] bronzes to the Merv mint can be considered secured] (Schindel 2005, 229; see also 2012, 70)).

The other series consists of gold (S.G1-i) and copper coins (S.C2-i and -ii) with the same designs. Their fabric and designs suggest that they were made at another mint, but the copper denomination, on the same *c.* 3.3g weight standard as the Balkh copper mint coins, suggests they were also made for circulation north of the Hindu Kush. The designs, particularly of the king standing making an offering at a small altar, owe more to Kushan iconography than Sasanian, so it is possible that they were intended to circulate further south, closer to the territory still held by the Kushans south of the Hindu Kush. The gold denomination is also a dinar on the Kushan standard, but both king and god are shown in Sasanian-style tunic, leggings and cloak.

The copper coinage is divided into two phases, but it is not clear which order they were issued in. They are distinguished by the position of the three dots control mark on the obverse, by the left elbow (phase i) or by the right hand (phase ii, as on the gold dinar). They are also distinguished by the altar which has a floral (phase i) or bird shape (phase ii), and on the reverse by the title of the god ΒΑΓΟ (phase i) or ΙΑΖΑΔΟ (phase ii); ΒΑΓΟ (bago) and ΙΑΖΑΔΟ (iazado) are terms used in Zoroastrianism for the divine beings, *yazatas*, who act on behalf of Ahuramazda, and there seems to be no difference in their meaning. There seem to be two different artists involved in the two phases, so

Figure 3.94 Copper coinage of Peroz I Kushanshah, Balkh mint (T.C1)
Copper coins were issued during the reign of the Kushano-Sasanian king Peroz I at the Balkh mint in three phases, as copper units of *c.* 3g. The first two phases are distinguished by the costume worn by the king and minor changes of design (as in the gold coinage of the same reign), for the third phase see Figure 3.86. The coins of both phases were inscribed in Bactrian.
a) unit of first phase (T.C1-i: 3850 1982.0626.10, 3.11g, 19mm)
b) coin of second phase (T.C1-ii: 3862 1990,0921.12, 3.26g, 16mm)

the differences may reflect the freedom of the die engravers rather than any deliberate change in iconography. The gold dinar has the floral altar and BAΓO, so relates most closely to the copper coins of phase one.

T.1 Peroz I, third Kushano-Sasanian ruler, c. AD 245–70: expansion south of the Hindu Kush (Figs 3.93–3.96)

Peroz I's coinage shows the expansion of Sasanian control of former Kushan territory south of the Hindu Kush, possibly as far as Peshawar (Kaʿba-ye Zardošt inscription line 3: Huyse 1999, 24 and 36), during the reign of Vasishka. The coins with the name of Peroz I fall into three groups on the basis of their representation of the king: wearing a Kushan helmet crown, wearing a flat crown with large pearls along the top (sometimes with palmettes along the sides and sometimes with a hair ball above), and wearing a lion-head crown. The three groups are considered to be issues of the same king as they occupy the same position within the sequence of Kushano-Sasanian coins. These three crown types appear to be used in the order of Kushan, flat and lion head. The flat crown is mostly used for the issues south of the Hindu Kush, but two rare types with it issued in Bactria seem to come at the end of his reign. The lion-head crown creates some confusion in understanding their attribution, as this crown is also used by the next ruler Hormizd I. It could be that unusually two Sasanian rulers share a crown, but the possibility cannot be ruled out that the coins in the name of Peroz, but with the lion-head crown, could be early issues of the next king Hormizd I, but with unchanged inscriptions naming Peroz.

Göbl (1984, 163) labels the Kushano-Sasanian coins bearing the name Peroz as 'Peroz 1–5' according to their crown types: 2 Kushan crown, 3 lion-head crown, 1 flat crown and 5 flat crown without hair ball (4 is the bull-horn crown here attributed to Peroz II). He is clear that the numbering is not intended to indicate five separate kings called Peroz, but merely to distinguish types (1984, 80) and in his plates he arranges the Peroz coins into mints and series to indicate the flow of issue. The sequence presented here makes it highly likely that the crowns attributed to the reign of Peroz I represent the same ruler, unless some evidence can be presented that three rulers called Peroz ruled consecutively over the same territory without interruption. The continuity of the lion-head crown into the following reign is problematic, and remains to be explained.

Four overstrikes by or on his coins create a clear indication of the context of his reign. Examples of both his northern (T.C1-i) and southern (T.C2-ii) copper coins have been recorded overstruck on Sasanian coppers of Shapur I (AD 240–70) minted in Merv. Another overstrike by a southern (T.C2-ii) copper coin is on an imitation Vasudeva coin of the type (F-imit.C1-ii) issued by the Kushano-Sasanians who preceded Peroz. A Peroz southern copper coin (T.C2-i or -ii) has also been found overstruck with the designs of a copper coin of Vasudeva II, an early issue with the Brahmi control marks *bha-vi* (J.C1-i).

T.2 Peroz I: coins for Bactria

The first coins issued in Bactria which feature the name of Peroz continue the use of Kushan designs (T.G1-i). The inscriptions are in Bactrian and give the king's name and titles: ΠΙΡΩΖΟ ΟΟΖΟΡΚΟ ΚΟÞΑΝΟ ÞΑΥΟ (Peroz great Kushan king). The spelling of the royal title ÞΑΥΟ is different to the Kushan period spelling ÞΑΟ, perhaps to conform more closely with the Pahlavi word *šāh* (written on the coins as an ideogram *MLKA*; MacKenzie 1971, 79). They were issued in both gold and copper and retained the general design of the gold imitation Vasudeva coins which were issued in Balkh after the former Kushan mint was captured by the Sasanian invaders early in the reign of Kanishka II. The control marks and treatment of design show that they sit right at the end of the sequence of the imitations (F-imit.G1-iv). The copper coins (T.C1-i) copy the designs of the gold issue rather than of the copper imitation Vasudeva series. The only departures from the original imitation Kushan design apart from the inscriptions is the addition on the obverse of a Brahmi *pe* (the king's initial) in the right field; the king is shown wearing a hair bun at the back of his head and in the representation of offering, his right hand is shown holding a small dish, presumably to pour the offering onto the flame, and there is curled smoke rising from the fire altar. On the reverse the god is given a beard. The denomination of the copper coins continues that of the earlier Kushano-Sasanian series but at a slightly lower weight standard of *c.* 3g. On both gold and copper the image of Oesho and bull on the reverse is given a new label in place of OHÞO: the god is called OOPZAOANΔO IAZAΔO in Bactrian, meaning the god with the quality of highness, which has been translated as 'high god', 'exalted god' or 'god

Figure 3.95 Gold and copper coinage of Peroz I Kushanshah, Begram mint (T.G2 and C2)
Gold coins in small numbers and copper coins in large numbers were issued in the name of Peroz from a mint at Begram, as dinars, *c.* 7.85g and copper units, *c.* 4.4g. The coins are inscribed only in Bactrian and showed both Sasanian and Kushan features. The dinars featured the Kushan goddess Ardochsho on the reverse and the copper units either the Kushan goddess Nana or a Sasanian version of the Kushan god Oesho, both emerging from a Sasanian throne-altar on the reverse. The copper coins were issued in two phases distinguished by the treatment of the king's crown.
a) dinar showing king in Sasanian dress and goddess Ardochsho offering the Kushan crown (T.G2-i: 3835 1892,0202.3, 7.87g, 20mm)
b) copper coin of first phase, featuring king wearing crown with a row of curls above brim, as on the gold dinars (T.C2-i: 3882 1922,0424.4501, 4.39g, 17mm)
c) copper coin of second phase, distinguished by king wearing a crown with palmettes surmounted by a row of jewels (T.C2-ii: 3885 1981,1007.1, 5.13g, 18mm)

Figure 3.96 Silver and copper coinage of Peroz I Kushanshah, Balkh mint (T.S1 and T.C1-iii)
Silver drachms and copper units were issued in the name of Peroz Kushanshah at the Balkh mint with the same crown as used at the Begram mint (T. C2-ii). The silver drachms were inscribed in Pahlavi and depicted an investiture scene like the coin of the first Sasanian Kushanshah (R.C1). The copper units were inscribed in Pahlavi on the obverse and Bactrian on the reverse. Both silver drachms and copper units combined Sasanian with Kushan design features.
a) drachm showing the king being invested by the exalted god on the reverse, labelled in Pahlavi (T.S1-i: 3836 1860,1220.249, 4.08g, 24mm)
b) unit featuring the exalted god and bull on the reverse, labelled in Bactrian (T.C1-iii: 3880 2000,0405.1, 3.44g, 20mm)

who acts in the high regions'. On later coins he is also termed ΒΟΡΖΑΟΑΝΔΟ ΙΑΖΑΔΟ and ΒΟΡΖΑΟΑΝΔΟ ΒΑΓΟ and in Pahlavi as *bwrz'wndy yzdty*, all having the same meaning.

Both gold and copper were probably made at mints at Balkh, as the succeeding gold coins of the next reign were often inscribed with that mint's name. There is no reason to separate the coins with this mint name from those without into two mints as asserted by Göbl (1984, 79), as they form a continuous sequence.

The second phases of the Balkh mints (T.G1-ii and T.C1-ii) are modified versions of the first coins, replacing the Kushan apparel of the king with Sasanian armour and a Sasanian-style headdress, the lion-head crown, but retaining the same inscriptions, except that on some dies the king's name is spelt ΠΙΟΡΩΖΟ and there is a progressive abbreviation of the reverse inscription. Similar animal-head crowns are known from Sasanian coins and reliefs, and in Sasanian emperor Bahram II's (AD 276–93) relief at Naqš-e Rustam a figure (perhaps Peroz I or his successor Hormizd I, who wears the same crown) is shown wearing a lion-head crown, but with a wing. On these coins the king is shown wearing two different treatments of the hair at the back of his head. On the earliest dies the hair is drawn as downward hanging ringlets and on the latter as a horizontally projecting triangular hair bun. Both hair styles are known from Sasanian coins: the downward ringlets on coins of Ardashir I, Varahran I and Narseh, while the horizontal hair bun first appears on Sasanian coins of Shapur I (compare particularly with Alram and Gyselen 2003, 241, pl. 20). The change in design of the copper coin was followed by a gradual drop in weight standard down to *c.* 2.3g.

Excavations in northern Afghanistan, Uzbekistan and Tajikistan have yielded examples of his northern coinage (Zeymal 1983, 262–8; Rtveladze 1982; Lukonin 1967; Gorin 2015).

T.3 Peroz I: southern coins

Gold and copper coins were also issued by Peroz I south of the Hindu Kush once he had captured more Kushan territory in the reign of Vasishka. His extension of rule into yet more Kushan territory enabled Shapur I to claim to rule up to Peshawar, by *c.* AD 262, in the Kaʿba-ye Zardošt inscription Pahlavi version: line 3 *kwšnhštr HN prhš OL pškbwr*; Greek version: line 4 κουσην[ων εθ]ν[η] εως εμπροσθεν πασκιβουρων (Sprengling 1953, 14, 73; Huyse 1999, 24 and 36). Peroz I's southern gold denomination is based on the Kushan dinar and the copper coinage on the Kushan copper unit. The weight standard of the Kushano-Sasanian coin is higher than its Bactrian counterpart, but falls rapidly following the dropping Kushan copper standard of the reign of Vasishka.

A new crown was adopted for the coins of these southern territories. The mints were probably located in Begram, where the Kushans had previously been making coins, and/or Peshawar. The gold coins (T.G2-i) show the king making an offering at a small altar surmounted by a trident, as on the Bactrian coins and their Kushan prototypes, but in Sasanian dress, wearing the flat crown with a row of pearls and a hair ball above. The inscription is slightly different to that on the Bactrian issues: ΠΗΡΩΖΟ ΟΟΖΟΡΚΟ ΚΟÞΑΝΟ ÞΑΟ and written to be read from the edge of the coin. The king's initial in Brahmi *pe* is in the right field. The goddess on the reverse holds a cornucopia and appears to be the Kushan goddess Ardochsho. She is labelled with her name and offers the Kushan crown, presumably to the king on the obverse, echoing the design on the first Kushano-Sasanian coins (R.C1-i), and apparently signifying Peroz's conquest of another part of the Kushan empire.

The copper coins made at Begram or nearby for the southern territory began with the same crown, but without the hair ball above. The first coins (T.C2-i) had a shorter version of the king's name ΠΙΡΩΖΟ ÞΑΥΟ and were struck using two reverses, featuring the high god with the Bactrian inscription ΒΟΡΖΑΟΑΝΔΟ ΒΑΓΟ or the Kushan goddess Nana labelled ΒΑΓΑ ΝΑΝΑ. The god is shown rising out of the top of a stepped fire altar with flames emerging from its upper surface. The fire altar is overlaid with a lion-legged and ribboned throne (so that the top of the altar and the seat of the throne are merged into a single surface) as on the coins of the first Sasanian emperor Ardashir I (Harper 1979, 51). The goddess Nana is shown with a flower on her brow and her head surrounded by a halo. The altar/throne design combines the sacred and secular nature of the Sasanian kingship. Incorporating the god into Ardashir I's altar/throne seems to represent a further merging of the Kushan coin design featuring a labelled god into the Sasanian symbols of power. The king's initial *pe* in Brahmi is inscribed on the fire altar shaft on the reverse. All subsequent issues (T.C2-ii) have a second version of the new crown with a higher crown and palmettes around its edge. They only featured the high god, now with his right hand raised on some dies (see reverses 1a and 3a), and have gradually degenerating inscriptions and the Brahmi initial *pe* is omitted in the most degenerate examples.

T.4 Peroz I: late issues

Two issues were made north of the Hindu Kush with designs featuring the new flat crown with a row of pearls along its top which had been introduced on the southern coins.

An issue of silver drachms on the Sasanian standard was struck at the Balkh gold mint, only known so far from a single specimen (T.S1-i). It can be attributed to the gold mint because it shares a control mark, Brahmi *go*, under the baseline on its reverse with a gold dinar (U.G1-i, obverse 1B/reverse 1b) minted there early in the next reign. The designs of this coin are adapted from the Sasanian drachm design with the king's bust on the front and the ruler and a deity on the reverse of silver drachms from Hormizd I (AD 272–3) to Hormizd II (AD 303–9), but here with only a small altar between them. The designs also owe something to those of the copper coins of the first Kushano-Sasanian king. The scene on the reverse, like the coins of the first king show an investiture scene in which the high god presents the diadem of kingship to the king. The inscriptions are in Pahlavi and on the obverse give the king's name and titles *mzdysn bgy pylwzy RBA kwš'n MLKA* (Mazda-worshipping Peroz great Kushan king); the inscription on the back, following Kushan practice, labels the images of the god *bwrz'wndy yzdty* and the king *pylwzy MLKA*. The representation of the high god is very different to that on the Bactrian gold and copper coins,

as he is shown enthroned holding a spear, wearing Sasanian dress and a crescent tiara with flames around his head. The god offers the king a diadem and the king makes an offering on a small altar.

Copper coins with the flat crown, but with the palmetted side, were also issued in the Balkh copper mint in its third phase (T.C1-iii), but retaining the high god design of the earlier two phases on their reverse. The obverse inscription was an abbreviated version of the silver coin's inscription: *pylwzy MLKA*, but the reverse retained its Bactrian inscription from the previous issues, but in the abbreviated and blundered form used on the late gold coins.

U.1 Hormizd I, fourth Kushano-Sasanian ruler, c. AD 270–300: prolific coinage (Figs 3.97–3.99)

The commonest coins in the Kushano-Sasanian series are the issues of Hormizd I. His prolific issues suggest a long reign. Like Peroz I he issued different coins for his northern and southern territories. Numerous overstrikes of his southern copper coins of the first phase by Vasudeva II's later copper coins (J.C1-ii), with a seated figure of the king and the control marks *ga-bha*, illustrate his relationship with the Kushans.

His position as Peroz I's successor is demonstrated by his continuation of Peroz's Bactrian gold coinage, retaining the same designs, including the lion-head crown type, but replacing Peroz's name with his own. He also issued silver coins with the same designs as Peroz, but with the lion-head crown rather than the flat crown.

U.2 Hormizd I: coinage for Bactria

Coins were issued in the name of Hormizd I at the Balkh gold and copper mints. The gold coinage (U.G1) is a continuation of the coinage of dinars and quarter dinars initiated by Peroz I: gold with standing king on the obverse and high god with bull on the reverse with Bactrian inscriptions, and copper with bust on the obverse and various reverse designs with Pahlavi inscriptions. In Bactrian the king's name and titles are ΩΥΡΑΜΑΖΔΟ ΟΟΖΟΡΚΟ ΚΟÞΑΝΟ ÞΑΥΟ (Hormizd great Kushan king), with alternative spellings of the king's name: ΟΥΡΑΜΑΖΔΟ or ΟΥΟΡΑΜΑΖΔΟ, and in Pahlavi *mzdysn bgy 'whrmzdy RBA kwš'n MLKA* (Mazda-worshipping Hormizd great Kushan king). The gold coins can be sequenced into four phases on the basis of progressive changes to the designs and inscriptions.

Phase one(U.G1-i) retained the treatment of the god from Peroz's later issues, but the spelling of the god's name changed from ΟΟΡΖΑΟΑΝΔΟ ΙΑΖΑΔΟ to ΒΟΡΖΑΟΑΝΔΟ ΙΑΖΑΔΟ. In phase two (U.G1-ii) there is the addition of the mint name ΒΑΧΛΟ in the obverse right field and of a ground line under the high god and bull. In phase three (U.G1-iii) the king's title changed from ÞΑΥΟ to ÞΑΥΟΝΟ ÞΑΥΟ and a crescent was gradually introduced to the top of the trident on the obverse. In phase iv (U.G1-iv) the king's title reverted to ÞΑΥΟ, the smoke from the altar was increased to rise both sides of the king's hand on many examples, the god's halo was replaced with rising ribbons, and the inscription was sometimes changed again to ΒΟΡΖΑΟΑΝΔΟ ΒΑΓΟ.

The copper coins which were made for the same zone of circulation went through five phases (U.C1-i to -v) distinguished by the king's crown, inscriptions and reverse designs. All phases continued the bust type introduced at the end of Peroz I's coinage, but with the lion-head crown. The design often features small control marks. The inscriptions on the obverse name the king in Pahlavi *'whrmzdy* and give him varying titles *MLKA* (king), *kwš'n MLKA* (Kushan king), or *RBA kwš'n MLKA* (great Kushan king). In phase four he has the imperial title *kwš'n MLKAn MLKA* (Kushan king of kings) or *MLKAn MLKA* (king of kings).

Phase one (U.C1-i) has the king wearing an artichoke above his crown and continues the high god and bull reverse of Peroz I's coinage with a Bactrian inscription ΒΟΡΖΑΟΑΝΔΟ ΙΑΖΑΔΟ. Phase two (U.C1-ii) has the same obverse as the first phase, but has an investiture scene on the reverse showing the high god offering a diadem to the king who makes an offering at a small altar, as on the reverse of Peroz I's silver coin. Most examples are uninscribed but some have a Pahlavi inscription naming the god and king. Phase three (U.C1-iii) also has the same obverse, but introduced the deity emerging from fire altar reverse design which continued to be used until after the Kidarite Huns took over the Kushano-Sasanian mints at Balkh. The inscription *bwrz'wndy yzdty* identifies the deity as the high god. The high god has the same attributes as on the silver coins of Peroz II, holding a spear and diadem with a tiara decorated with a crescent and surrounded by flames. Phase four (U.C1-iv) is identical to phase three except the king has the imperial title. Phase v (U.C1-v) is also identical to phase three except the king has a striped globe in place of the artichoke above his crown. As in the gold the final phase of the copper reverts to the royal title.

Figure 3.97 (facing page) Gold coinage of Hormizd I Kushanshah, Balkh mint (U.G1)
Gold coins were issued under Hormizd I Kushanshah at a mint in Balkh, in four phases, as dinars, *c.* 7.8g, and occasional quarters. The coinage was extensive and the four phases are distinguished only by details of design. The most significant detail is that in the third phase (d–e) the king was given the title Kushanshahanshah. All phases were inscribed in Bactrian and featured the exalted god and bull on the reverse. Some varieties featured the mint name Balkh in Bactrian. A second mint at Begram also issued gold dinars with the same designs (not illustrated here), but distinguished by style, in two phases with different inscriptions, corresponding with the main mint's second and third phases (U.G2-i and -ii).
a) dinar of first phase showing the exalted god wearing a halo and without ground line (U.G1-i: 4200 1894,0506.172, 7.73g, 28mm)
b–c) dinar and quarter dinar of second phase showing the exalted god with halo standing on a ground line (U.G.1-ii: 4202 1983,0817.5, 7.82g, 29mm; 4203 1939,0516.1, 1.64g, 20mm)
d–e) dinar and quarter dinar of third phase showing the exalted god with halo standing on a ground line, with Bactrian inscription including the title Kushanshahanshah (4207 1888,1208.562, 1.89g, 20mm; U.G1-iii: 4206 1985,0306.1, 7.81g, 29mm)
f) dinar of fourth phase showing the exalted god wearing raised ribbons and ground line, with the mint name in Bactrian ΒΑΧΛΟ (Balkh) in the right field of the obverse (U.G1-iv: 4208 1983,0817.6, 7.84g, 31mm)

Figure 3.98 Copper coinage of Hormizd I Kushanshah, Balkh mint (U.C1)
Copper coins were issued in the name of Hormizd I Kushanshah at the Balkh copper mint in five phases as units of *c.* 2–3g. The phases are distinguished by their reverse designs, the king's title and the ornament on his headdress. All phases were inscribed in Pahlavi. In the fourth phase (not illustrated) the king was given the title Kushanshahanshah. The phases also saw a falling weight standard, from *c.* 2.8g in the first and second phases to *c.* 2.1g in the third to fifth phases.
a) unit of first phase with the exalted/high god and bull reverse (U.C1-i: 4213 1990,0921.36, 2.99g, 17mm)
b) unit of second phase with investiture scene showing the exalted god investing the king (U.C1-ii: 4232 1982,0626.18, 2.26g, 15mm)
c) unit of third phase, showing the king wearing artichoke ornament on headdress, with the exalted god emerging from altar on reverse (U.C1-iii: 4242 1990,0921.49, 2.19g, 16mm)
d) unit of fifth phase, showing the king wearing globe ornament on headdress, with the exalted god emerging from altar on reverse (U.C1-v: 4261 1990,0921.60, 2.02g, 14mm)

Figure 3.99 Copper coinage of Hormizd I Kushanshah, Begram mint (U.C2)
Copper coins were issued during the reign of Hormizd I at the Begram copper mint in four phases as units of *c.* 3.8g. The phases are distinguished by their inscriptions and use of tamgas. The coins feature two names, Kavad and Mēzē , who are presumed to be subordinate rulers responsible for the issues. The phases are distinguished by their inscriptions and the use of tamgas.
a) unit of first phase with tamga on obverse before the king's face, cut into the die on top of a Pahlavi inscription which preceded the addition of the tamga (U.C2-i: 4277 1994,0911.4, 4.07g, 17mm)
b) unit of second phase with Bactrian ΚΑΒΑΔ (Kavad) on obverse and tamga used in the first phase on altar stem on reverse (U.C2-ii: 4285 1980,1005.11, 3.62g, 17mm)
c) unit of third phase with Bactrian ΚΑΒΑΔ (Kavad) on obverse, but no tamga (U.C2-iii: 4290 1992,0119.223, 5.33g, 19mm)
d) unit of fourth phase with Bactrian ΜΗΖΗ (Mēzē) on obverse and tamga on altar stem on reverse (U.C-iv: 4623 1980,1005.52, 3.41g, 16mm)

Figure 3.100 Gold coinage of Hormizd I Kushanshah, Merv mint (U.G3)
Gold dinars were struck in the name of Hormizd I at the Merv mint, on the Sasanian weight standard of *c.* 7.2g. The designs adapt the Sasanian design used on the coins of the Sasanian emperor Varahran II, showing the king being invested by a deity with rayed headdress, either Mithra or the Sasanian version of Oesho. The issue was inscribed in Pahlavi.
a) dinar with the mint name Merv (U.G3-i: 4208 1850,0412.101, 7.16g, 21mm)

Figure 3.101 Silver coinage of Hormizd I Kushanshah, Merv mint (U.S1)
Silver drachms were struck in the name of Hormizd I at the Merv mint, on the Sasanian weight standard of *c.* 4.2g. The designs adapted the Sasanian design used on the coins of the Sasanian emperor Varahran II, but showed the king being invested by the exalted god on the reverse, the same design as featured on the silver coins of Peroz I (T.S1). The issue was inscribed in Pahlavi and the god was labelled as the 'exalted/high god'. Similar coins were struck with a mint name which could represent Herat (U.S2-i), but die linked with the issues inscribed with the mint name Merv.
a) drachm inscribed with the mint name Merv (U.S1-i: 4209 1982,1107.1, 4.14g, 25mm)

U.3 Hormizd I: southern coins

Both gold and copper coins were made for circulation in Hormizd I's southern territory. The gold coins were issued in two phases (U.G2-i and -ii) which have the same distinctive features as the Balkh gold mint phases two and three. They are distinguished from the main mint coins by style and the inclusion on the first dies of the same tamga as appears on the early issues of the southern copper mint (U.C2-i and -ii). The only example of phase two shows the king holding a spoon in place of the usual dish, a feature it shares with some Balkh mint gold coins of phase two (U.G1-ii, obverse 2B) and the silver coins of the same 'king of kings' period (U.S1-i; see §U.4 below).

The southern copper mint continues the denomination introduced by Peroz I, replacing his flat crown with the lion-head crown on the obverse and with the high god emerging from the altar/throne on the reverse. Phase i (U.C2-i) started with a Pahlavi inscription on the obverse naming Hormizd I, but quickly replaced his name with a tamga. A blundered inscription on the reverse also appears to be in Pahlavi, naming the god. In phase two (U.C2-ii) the tamga is moved to the reverse onto the shaft of the altar and replaced on the obverse with the name Kavad KABAΔ. There is no title or epithet to explain the name, so it seems likely this was the name of the person responsible for the coinage, perhaps as satrap/governor of the southern region. Later in the reign (phase iv) this name was replaced with Mēzē MHZH (U.C2-iv), presumably another local ruler. In phase three (U.C2-iii) the tamga is removed, but in phase four a slightly different tamga is again featured on the reverse. There is also a gradual shift in coining technology taking place as the blanks for the copper coinage were reduced in diameter and more crudely made (often made of square pieces of metal, rather than round as before). On the early phases the artichoke above the lion-head crown is normally visible, but in the later phases it is often off the edge of the coin, or perhaps not on the die. The weight standard is also slightly lighter than in the previous reign.

U.4 Hormizd I: special gold and silver issues on the Sasanian standard (Figs 3.100–3.101)

Sasanian denomination gold and silver coins were issued by Hormizd I during the period when he adopted the title king of kings. Most of them have the mint name Merv on them. One issue is thought to have the mint name Herat (U.S2-i), but shares an obverse die with one of the Merv coins (U.S1-i, obverse 1B), so was made in the same place as them. It is possible that the mint names indicate the territory in which they were intended to be circulated rather than the place where they were made, particularly as the similar silver denomination issued in the name of Peroz I (T.S1-i) shared a Brahmi control mark *go* with a gold die (U.G1-i, reverse 1b)

Figure 3.102 Gold coinage of Hormizd II Kushanshah, Balkh mint (V.G1)
Gold dinars were issued at the Balkh mint in the name of Hormizd II Kushanshah. So far only known from a single specimen, these dinars seem to have been struck on a weight standard of *c.* 7.85g. Unlike all other Kushano-Sasanian dinars, the issues for this ruler have an investiture scene, like those on the earlier silver drachms, on the reverse, showing the king being invested by the goddess Anahita, who is labelled. The obverse is inscribed in Bactrian and the reverse in Pahlavi.
a) dinar with the mint name in Bactrian ΒΑΧΛΟ (Balkh) in the right field of the obverse (V.G1-i: 4445 1986,0812.1, 7.84g, 31mm)

Figure 3.103 Copper coinage of Hormizd II Kushanshah, Balkh and Begram mints (V.C1 and C2)
Copper units were issued during the reign of Hormizd II from two mints, the first in two phases and the second in one. The Balkh mint coins were struck to a standard of *c.* 2.1g and inscribed in Pahlavi, while the Begram mint coins were heavier and struck to a standard of *c.* 3.5g and inscribed in Bactrian. The latter were a continuation of the coins issued in the reign of Hormizd I in the name of the local ruler Mēzē. The phases of the first mint can be distinguished by the deity depicted on the reverse.
a) unit of Balkh mint's first phase, with the exalted god emerging from the fire altar on the reverse (V.C1-i: 4446 1990,0921.66, 2.4g, 14mm)
b) unit of Balkh mint's second phase, with the goddess Anahita emerging from the fire altar on the reverse (V.C1-ii: 4453 1917,1103.32, 1.88g, 14mm)
c) unit of the Begram mint (V.C2-i: 4459 1980,1005.77, 3.17g, 16mm)

used at the Balkh mint and a newly discovered silver coin of Varahran with the same designs has the mint name Balkh (Ch. 1 §2.2.4).

The gold coin (U.G3-i) was made using Sasanian-style designs on obverse and reverse. The obverse has his usual lion-head crown surmounted by artichoke. The reverse shows the king standing raising his hand to acknowledge the deity (the rayed headdress suggests it is Mithra) who offers him the diadem of kingship; between them is a fire altar decorated with a diadem around its shaft with ribbons hanging to either side. The inscription is in Pahlavi, the same on both sides of the coin, presenting the king's name and titles *mzdysn bgy 'whrmzdy RBA kwš'n MLKAn MLKA* (Mazda-worshipping Hormizd great Kushan king of kings). The mint name *mrwy* is above the altar. Such investiture scenes appear on Sasanian coins from Hormizd I (AD 272–3) to Hormizd II (AD 303–9), but only on the coins of Sasanian Hormizd I and Bahram II (AD 276–93) is the king shown raising his hand and the deity offering a diadem as on Hormizd I Kushanshah's coins. The treatment of the fire altar, with its shaft tied with a diadem, on Hormizd I Kushanshah's gold coin is also featured on the coins of Bahram II. This coincidence of treatment supports the proposed relationship between Bahram II and Hormizd I Kushanshah (see §U.1 above).

The silver drachms (U.S1-i) with the mint name Merv and the example attributed to Herat (U.S2-i) have the same obverse design and inscription as the gold coins, but by a different hand. The reverses are based on the silver coin of Peroz I, showing the king making an offering and raising his hand acknowledging the enthroned high god who offers a diadem. The condition of the coins of Hormizd I reveals

more detail and shows the king to be holding a spoon over the altar. The god wears the same crescent on tiara headdress as on Peroz I's coin. He also holds a spear and his head is surrounded by flames. The inscription labels the god and the king *bwrz'wndy yzdty – 'whrmzdy RBA kwš'n MLKAn MLKA*.

These exceptional issues for Merv and Herat(?) have been used to suggest linkage with a historical event (Bivar 1983; Brunner 1974, 156; see Ch. 2 §R–Y.1). It has been proposed that Hormizd I Kushanshah was the brother of the Sasanian king Bahram II (AD 276–93) referred to in Classical sources as raising a rebellion in the east *c.* AD 280–5 (Carter 1985, 225). The coin sequence at Hormizd I's main gold and copper mints at Balkh suggest a change of relationship between the Kushanshah and the Sasanian emperor midway through his reign. These coins issued in the third of four phases at his Balkh gold mint and in the fourth of five phases at his Balkh copper mint give Hormizd I full imperial titles 'Kushan king of kings' Bactrian ÞAYONO ÞAYO (U.G1-iii) or in Pahlavi *kwš'n MLKAn MLKA* (U.C1-iv). The use of the imperial title and the issuing of coins for Merv suggest that the proposal that Hormizd I was Bahram II's revolting brother should not be discounted.

V.1 Hormizd II, fifth Kushano-Sasanian ruler, c. AD 300–3: a brief rule (Figs 3.102–103)

The coins of Hormizd II are based on those of Hormizd I, but distinguished by the adoption of a winged crown. A so-far unique gold coin (V.G1-i) has an obverse which shares all the features, including the Bactrian inscription, of Hormizd I's last issues (U.G1-iv), but shows the king in his winged crown. Above his crown is a striped globe as on the last issue of Bactrian copper coins made for Hormizd I. The reverse is novel and based on his predecessor's silver coin reverse, showing the king making an offering with a spoon in his right hand as on Hormizd I's silver coins. In place of the high god the investiture is delivered by an enthroned image of Anahita, and as on the prototype, Pahlavi labels identify the figures: *'n'hyt' MROTA – 'whrmzdy MLKA* (lady Anahita, king Hormizd). Recently another gold coin has appeared in the market showing the same reverse, but with a bust in place of the standing king on the obverse, surrounded by a Pahlavi inscription (identical to that on the silver coins of Hormizd I). The fabric of the coin is not like that of the other coins of this period, suggesting that it is probably a modern forgery.

Alongside the gold coinage the Balkh copper mint also issued coins with images of Anahita (V.C1-ii). The design was based on the last issues of Hormizd I with a bust on the obverse and the same inscription in its simplest form *'whrmzdy MLKA* and a deity emerging from an altar on the reverse, but now the obverse bust had the winged crown and the deity on the reverse was Anahita, labelled *'n'hyt' MROTA* as on the gold coin. A few examples are recorded where the reverse of the previous reign continued to be used (V.C1-i). The southern copper mint issued coins modelled on the final issue of the previous reign, but with the king wearing the winged crown. The local ruler Mēzē's name continued to be used.

Hormizd II is placed immediately after Hormizd I because all later kings issued Bactrian gold coins on which the inscription begins with the title ΒΑΓΟ (lord) before the king's name and this coinage omits the title like its predecessors. The number of coins surviving and the close stylistic relationship between the coins of Peroz II and Hormizd I suggest that Hormizd II had a very short reign.

W.1 Peroz II, sixth Kushano-Sasanian ruler, c. AD 303–30: last reign south of the Hindu Kush (Fig. 3.104)

Like his predecessors, Peroz II issued coins in two separate currency zones north and south of the Hindu Kush. His gold and copper coins for Bactria used the basic designs of Hormizd I, but with new inscriptions and crown.

The gold coins of the Balkh mint (W.G1) introduced a new inscription element: an additional title ΒΑΓΟ for the king, so that his gold coins were all inscribed ΒΑΓΟ ΠΙΡΩΖΟ ΟΟΖΟΡΚΟ ΚΟÞΑΝΟ ÞΑΥΟ (Lord Peroz great Kushan king). His crown is flat with bull horns rising from its curved top and a striped globe between the horns. The treatment of the trident with crescent and the smoke rising to both sides of the king's hand are the same as on Hormizd I's fourth phase and Hormizd II's only known coins. On his shoulders are similar striped globes. As on the coins of Peroz I two different hair styles are discernible on Peroz II's coins, where he is shown with a horizontal hair bun, as on his immediate predecessors' coins, or a downward hang of ringlets, in the same style as on the coins of Sasanian emperor Narseh (AD 293–303). The high god with bull reverse is inscribed with the standard label: ΒΟΡΖΑΟΑΝΔΟ ΙΑΖΑΔΟ. The representation of the god with halo is based on phase three coins of Hormizd I.

The copper coins made in Balkh (W.C1) follow the pattern set by Hormizd I, but with Peroz II's new crown featuring bull horns, but only the downward ringlet hair style. The Pahlavi inscription on the obverse is always blundered *pylwzy kwš'* [sic] *MLKA* (Peroz Kushan king); the reverse shows the high god emerging from fire altar with the usual Pahlavi label *bwrz'wndy yzdty*.

As under Hormizd I there is a small issue of gold coins made at the southern mint (W.G2), with all the characteristics of the Balkh mint coins, but with different control marks and in a different style (similar to the southern mint coins of Hormizd I), particularly noticeable in the treatment of the god and inscription on the reverse. The southern copper coins are identical to the coins of Hormizd I's last phase and of Hormizd II's only phase, all with the name of the local ruler Mēzē in Bactrian MHZH on the obverse and tamga on the reverse, but with the Peroz II's bull-horn crown and both styles of hair.

X.1 Shapur II, Sasanian emperor, c. AD 309–79: Kushano-Sasanian style copper coinages (Figs 3.105–106)

At the end of the reign of Peroz II the Kushano-Sasanian state was divided, probably as a response to the rise in power of the Kidarite Huns. In the northern territories the last Kushano-Sasanian king Varahran seems to have fallen under the control of the Huns. Presumably to counteract this growing threat Shapur II took direct control of the southern Kushano-Sasanian territory and issued Kushano-Sasanian style copper coins there. He also issued Sasanian-style silver

Figure 3.104 Gold and copper coinage of Peroz II Kushanshah, Balkh and Begram mints (W.G1 and W.C1 and C2)
Gold dinars and copper units were issued in the reign of Peroz II from two mints, at Begram and Balkh. The gold dinar designs were the same standing king and exalted god with bull as those used under Peroz I and Hormizd I, and the two mints are distinguished by style (Begram is not illustrated). As in the previous reigns copper units were issued on two different weight standards, *c.* 2.1g at Balkh and *c.* 3.5g at Begram, and with two different designs. The Balkh copper units were inscribed in Pahlavi, while the Begram issues were inscribed in Bactrian.
a) dinar of Balkh mint, with D-shaped symbol in right field (W.G1-i: 4460 1982,0626.2, 7.92g, 32mm)
b) copper unit of Balkh mint, inscribed in Pahlavi (W.C1-i: 4462 1859,0220.145, 2.32g, 16mm)
c) copper mint of Begram mint, when visible the inscription is in Bactrian (W.C2-i: 4501 1980,1005.78, 3.16g, 16mm)

drachms, attributed to the Kabul region because of local finds and their presence in Chinese hoards, which at this period mostly consist of coins from the eastern mints of the Sasanians (Schindel 2004, 235–7).

Shapur II's Kushano-Sasanian style coins begin with issues (X.C1-i and -ii) from the southern copper mint of the Kushano-Sasanian kings that closely resemble the late issues of Hormizd I, Hormizd II and Peroz II. They have the same crude fabric, often struck on square blanks, of all the coins in the name of Mēzē. The coins are distinguished from their Kushano-Sasanian forerunners by the crenellated crown of Shapur II, the Bactrian inscription ΚΑΒΑΔ (Kavad; X.C1-i) or ÞΑΒΟΡΟ (Shapur; X.C1-ii), and a smaller tamga on the reverse. The coins were made very poorly and gradually the designs became more difficult to understand. For many coins the reverse die was allowed to wear so much that the design gradually disappeared. Many of the examples that have been recorded are very underweight and it is possible that they are unofficial copies made during the Kidarite period.

A separate series (X.C2-i) of Kushano-Sasanian coins with Shapur II's bust were made at a second copper mint, perhaps at Taxila, where a group were found in a votive deposit in a Buddhist monument (Marshall 1951, pl. 244, nos 279–82). These pieces differ from the issues of the southern copper mint because they are mostly made on full-weight well-formed round blanks, and have flames emerging from the altar/throne, in place of the high god, on the reverse. They are mostly inscribed in Bactrian with the emperor's name ÞΑΒΟΡΟ, but the first dies have his name in Pahlavi šhpwhry. The weight standard of these coins at *c.* 4g seems to be an attempt to restore the original standard of the southern copper series last seen under Peroz I. Coins using the same design, but without inscriptions, on a much lower weight standard have been recorded (X.C2-ii). It is possible these lighter coins may represent issues of the same mint, and they have been recorded in the catalogue that way, but from a later phase of production which responded to the falling weight of other coins in the region. The standard of about 2g seems to correspond with that of the issues of Kipunadha, and the imitations of his issues issued under the early Kidarites. The relatively small number of such coins reported should not be taken as indicative of a small production; it may simply reflect reported hoards or collecting practice.

Y.1 Varahran, seventh Kushano-Sasanian ruler, c. AD 330–59: Kidarite Hun puppet (Figs 3.107–3.110)

Gold and copper Kushano-Sasanian coins in the name of the Kushanshah Varahran were only issued in the northern territory of the Kushano-Sasanian state. The start of these issues is contemporary with the issues by the Sasanian emperor Shapur II in former Kushano-Sasanian territory south of the Hindu Kush.

The name Varahran appeared on Bactrian coins with several crown types and only ended when it was replaced with the name of a Hun, Kushanshah Kidara (see §Z.1

Figure 3.105 Copper coinage of Shapur II Sasanian emperor, Begram mint (X.C1)
Copper units were made at Begram with the portrait of the Sasanian emperor Shapur II (AD 309–379) in two phases. Both phases used the bust and throne/fire altar design of the southern Kushanshah issues of previous reigns. The first phase began on the *c.* 3.5g weight standard, but then deteriorated so that some second phase coins weighed less than 2g. The two phases are distinguished by the name which appears on them, Kabod in the first phase and Shapur in the second. However, on most coins the name is off-flan and many examples are so light and crude it suggests either problems at the mint or unofficial production.
a) coin of the first phase inscribed in Bactrian KABAΔ (Kavad) on obverse in front of the king's face (X.C1-i: 4517 1894,0506.1288, 3.69g, 15mm)
b) coin of the second phase inscribed in Bactrian ÞABOPO (Shapur) on obverse (X.C1-ii: 4534 1980,1005.90, 2.65g, 15mm)
c) coin in which the name and phase are unclear (4579 1980,1005.116, 3.24g, 18mm)

Figure 3.106 Copper coinage of Shapur II Sasanian emperor, Taxila mint (X.C2)
Copper coins were made at Taxila (?) with the portrait of the Sasanian emperor Shapur II, AD 309–379, in two phases. The first phase coins were struck on a weight standard of *c.* 4g, higher than coins of the Begram mint (X.C1) but the weight dropped significantly in the second phase, to *c.* 2g or less. The two phases are distinguished by the name which appears on them, in the first phase the units were inscribed in Bactrian with the name Shapur on the obverse, but the second phase are illegible. The issues are distinguished from the Begram mint issues by the flames which appear above the altar on the reverse, where visible coins from Begram have the bust of a god in this position.
a) coin of the first phase inscribed in Bactrian ÞABOPO (Shapur) on the obverse (X.C2-i: 4680 1922,0116.43, 3.69g, 19mm)
b) coin of the second phase (X.C2-ii: 4686 1982,1117.14, 2.34g, 14mm)

below). Kidara's first issues represent the ruler with a flat crown decorated with rows of petals, with a ball above flanked by raised ribbons (Z.G1-i). The same crown was featured on the last issues in the name of Varahran (Y-Q. G1-i), so it is likely that they were issued by Kidara. Whether the coins were nominally acknowledging Varahran Kushanshah, or the name had simply become immobilised on the coinage as it was copied from earlier coins is impossible to tell. Two other crown types appear on Bactrian gold coins in the name of Varahran: a flat crown (Y.G1-i to -ii and Y-O.G1-i to -iii) decorated with florets, and a ram's horn crown (Y-P.G1-i). The ram's horn crown is also found on coins from Gandhara which have the name of the Kidarite ruler Peroz (Cribb 2010, 145, no. 66), so it seems likely that they represent the same phenomenon as the coins in the name of Varahran with Kidara's crown. Both the Kidara and Peroz gold coins in the name of Varahran have another feature, a tamga, which distinguishes them from the coins of Kushano-Sasanian rulers before Varahran. This tamga is also known from Kidarite copper coins issued in Gandhara with Kidara's crown (*ibid.*, 145, no. 67). It therefore seems likely that the tamga is an emblem of the Kidarite Huns and was placed on the coins to identify their responsibility for the issue of these coins. The earliest Bactrian gold coins with the Kidarite tamga show the king wearing a flat crown with florets (Y-O.G1-i to -iii) and probably coincide with the time of Kirada the first Kidarite ruler to issue coins in Gandhara immediately before the issues by Kidarite Peroz, so could be attributed to Kirada.

Before the Kidarite tamga issues there are coins with the same crown, but without the tamga, which could be attributed to Varahran himself (Y.G1-i to -ii). Interpreting these coins raises similar problems. There are no Varahran

Figure 3.107 Gold coinage of Varahran Kushanshah, Balkh mint (Y.G1)
Gold dinars and occasional quarter dinars were issued in the name of Varahran Kushanshah at the Balkh mint in two phases, to a standard of *c.* 7.8–7.9g. The coins of both phases had the usual designs of standing king and exalted god with bull and were inscribed in Bactrian. The phases are distinguished by a design detail, the ties of the diadem worn by the god on the reverse.
a) dinar of the first phase, distinguished by diadem ribbons to either side of the god's head (Y.G1-i: 4689 1983,0528.1, 7.69g, 32mm)
b) dinar of the second phase, distinguished by diadem ribbons both shown to the right of the god's head. This example has the mint name in Bactrian ΒΑΧΛΟ (Balkh) on the obverse in the bottom right, between tamga and inscription (Y.G1-ii: 4690 1860,1220.218, 7.62g, 31mm)

Figure 3.108 Silver coinage of Varahran Kushanshah, Balkh mint (Y.S1)
Silver coins were issued under Varahran from a mint at Balkh. Until recently silver coins of the Kushanshahs were only known for Peroz I and Hormizd I, but a silver drachm of Varahran has recently been discovered. It has the same designs, bust on obverse and the exalted god investing the king on the reverse, as the earlier silver drachms, but it has the Pahlavi inscriptions and image of Varahran and the mint name of Balkh in Pahlavi: *bhly*.
a) drachm inscribed in Pahlavi: obv: *mzdysn bgy wrhr'n RBA kwš'n MLKA* (Mazda worshipping Varahran great king of Kushan); reverse: (on right) *bwrz'wndy yzdty* (the exalted god); (above) *bhly* (Balkh); (on left) *wrhr'n RBA kwš'n* (below) *MLKA* (Varahran the great king of Kushan) (Y.S1-i, Heinz Bons collection)

Figure 3.109 Copper coinage of Varahran Kushanshah, Balkh mint (Y.C1)
Copper coins were issued in the name of Varahran Kushanshah from a mint at Balkh mint in two phases, as units of less than 2g. This series might have continued into the period when the Kidarite Huns added their tamga to gold issues in the name of Varahran. The two phases are distinguished by the ornament on the king's crown, artichoke in the first phase and globe in the second phase.
a) unit of first phase (Y.C1-i: 4692 1906,1103.5323, 1.75g, 14mm)
b) unit of second phase (Y.C1-ii: 4696 1982,0626.32, 1.38g, 15mm)

Figure 3.110 Gold coinage of Varahran Kushanshah with Kidarite tamga, Balkh mint (Y-O.G1)
Gold coins were issued as dinars and quarter dinars in the period of the Kidarites but with the name of Varahran, from a mint at Balkh, in two phases, at a standard of *c.* 7.8g. These coins are distinguished from the issues of Varahran by a Kidarite Hun tamga which replaced the nandipada in the right field of the obverse.
a) dinar of first phase with rosette above the tamga in right field and Bactrian Ϙ in left field (Y-O.G1-i: 4699 1893,0204.4, 7.86g, 33mm)
b) dinar of second phase with Bactrian Ϙ above the tamga and crescent on stand below in right field (Y-O.G1-ii: 4701 1982,0626.3, 7.74g, 35mm)

Figure 3.111 Gold and copper coinage of Varahran Kushanshah with ram's horns crown, Balkh mint (Y-P.G1)
Gold dinars, occasional quarter dinars and copper units in the name of Varahran Kushanshah were issued in the reign of Peroz. They are distinguished from previous issues by a new ram's horns crown.
a) dinar with rosette above the tamga in the right field and Bactrian X in the left field of the obverse. The Bactrian mint name ΒΑΧΛΟ (Balkh) in the right field of the obverse (Y-P.G1-i: 4705 1982,1108.1, 7.68g, 34mm)
b) quarter dinar with Brahmi *pe* in right field of obverse (Y-P.G1-i: 4708 1991,0101.1, 1.78g, 22mm)
c) unit with ram's horns crown (Y-P.C1-i: 4715 1894,0506.131, 1.47g, 13mm)

issues corresponding to the currency zone south of the Hindu Kush so it seems Shapur II had already taken control of that Kushano-Sasanian territory by the time coins were issued in Varahran's name. If, and it is only an assumption, Shapur II's seizure of that territory was a response to the Kushano-Sasanian rulers falling under the authority of the Huns, then Varahran might have been a puppet right from the start of his reign. In which case even the coins without tamga would have been issued under Hunnic rule in Bactria, even if the authority the coin refers to is Varahran. There is simply no way to tell from the coins, which are referencing political symbols for their legitimacy, and not necessarily communicating the political reality.

The Bactrian copper coins inscribed with the name Varahran (Y.C1-i to -ii; Y-P.C1-i; Y-Q.C1-i) do not have the tamga design added at any point, but do show all the three crowns found with his name on the gold. It is therefore plausible that copper coins were issued at the same time as gold coins with the same crown, and that the political reality of Hun rule and control over the issues was the same. The lack of tamga means that the two stages in coinage with the flat crown with florets cannot be distinguished for the copper coins, so both are discussed here.

Varahran's gold coins showing the king wearing flat crown (Y.G1-i to -ii) but without tamga are based on the final phase of coins under Hormizd I (U.G1-iv), but the crown is surmounted by an artichoke. The crown on the first coins in this phase are decorated with two rows of florets (obverses 1A, 1B, 1C, 2A) and later coins with a row of petals below a row of dots (obverses 3A and 4A). The inscription in Bactrian is ΒΑΓΟ ΟΑΡΑΥΑΡΑΝΟ ΟΟΖΟΡΚΟ ΚΟΡΑΝΟ ΡΑΥΟ (Lord Varahran great Kushan king) and the king is shown with the downward ringlets hair style, as on coins of Peroz II. The first phase coins (Y.G1-i) show the high god with two ribbons rising either side of his head as on Hormizd I's last gold coinage and some coins feature the king holding a spoon over the altar. Second phase coins (Y.G1-ii) move both ribbons to the right of the god's head, the treatment used on all later coins and the king's crown is represented in a more simplified version. The early coins of the phase (obverses 1A–1I) show the crown decorated with a row of petals under a row of dots as on the later coins of the previous phase; the later coins (obverses 2A–2F) have a simplified version of this crown with the row of petals becoming a row of dots.

Varahran's copper coins were issued from a single mint, presumably the Balkh mint previously used under Peroz II, and continued the designs, the bust of the king and Oesho emerging from a fire altar on the reverse. The flat crown with bull horns of Peroz II was replaced with a flat crown decorated with florets and surmounted by either an

artichoke in the first phase of production (Y.C1-i), or a striped globe (Y.C1-ii) in the second phase. The inscription was altered only to incorporate Varahran's name. The weight standard decreased with the start of Varahran's reign, from just over 2g under Peroz II to between 1 and 2g under Varahran, but remained stable over both phases. The new weight standard is comparable with that of the Kushan king Kipunadha and the immediate imitations of his coinage (§M.1). A few dies were engraved with the king facing left instead of right, but, as these have their inscriptions in mirror form, they were probably die engraver's mistakes. The obverse inscriptions give the king's name and titles *wrhr'n RBA kwš'n MLKA*, but on some dies *RBA* or *RBA kwš'n* are missing. As in previous reigns the reverse shows the high god emerging from an altar and is labelled *bwrz'wndy yzdty*.

Y-O.1 Kirada, first Kidarite ruler in the name of Varahran Kushanshah, c. AD 345–50

The second series of gold coins for Bactria in the name of Varahran are distinguished from the first by the replacement of the nandipada in the obverse right field with the Kidarite tamga (Y-O.G1-i to -iii). Among them are coins struck with dies inscribed with the mint name BAXΛO (Balkh). All examples feature the second version of the god's ribbon arrangement, both to the right, on their reverses. One example (reverse 1c) of phase one shows the high god in an exceptional form, with his head drawn surrounded by flames and wearing a crescent tiara as on the silver coins of Peroz I and Hormizd I, but with the beard and hair buns which are normal for the god's representation accompanied by bull on the gold dinars. This suggests that the enthroned deity with his head surrounded by flames and wearing a crescent tiara and the Sasanian version of Kushan Oesho with bull were the same deity, rather than two separate gods as suggested by Sinisi (2015, 216–17).

The same crown varieties are found as before the introduction of the tamga. Coins of phase one (Y-O.G1-i) use the crown with two rows of florets, but gradually the swastika, which was found on all Kushano-Sasanian issues, and in the period of Vasudeva I imitations as one of the markers of Sasanian control of production, was phased out. Phase two uses a cruder version of the crown with florets and phase three uses the crown with petals and dots. The details of both phases two (Y-O.G1-ii) and three (Y-O.G1-iii), particularly the rendering of part of the reverse inscription as a squiggly line, suggest that they could have been issued later than the coins of the next Kidarite series with ram's horn crown (Y-P.G1). The rationale for the later re-use of this design is not clear.

There are copper coins which correspond in their treatment of the king's crown, but lack the Kidarite tamga (Y.C1-i and -ii). They are listed with the coins of Varahran without the tamga (see §Y.1), but were issued alongside these gold issues with tamga, as the Kushano-Sasanian style copper coinage continued to be issued in the name of Varahran with the crowns of both Kidarite Peroz (Y-P.C1-i) and Kidara (Y-Q.C1-i).

Y-P.1 Peroz, second Kidarite ruler in the name of Varahran Kushanshah, c. AD 350–5 (Fig. 3.111)

The coins of the third Bactrian series in the name of Varahran have a crown with ram's horns. Their attribution to the mint of Balkh is confirmed by the gold examples (Y-P.G1-i) inscribed with the name of this mint in Bactrian BAXΛO. Both gold and copper coins can be attributed to this period. The identification of their issuer as Peroz is confirmed by the Gandharan issues with the same crown and with his name in Brahmi (P.C1; Cribb 2010, 145, no. 66). His initial in Brahmi *pe* appears on one of the gold quarter dinars with this crown (Y-P.G1-i).

The copper coins of this series (Y-P.C1-i) only differ from those of the previous reigns through their use of the ram's horn crown; like the preceding issues there are a few dies (obverse 2A) with left-facing busts, but unlike the earlier issues (Y.C1-i, obverse 1E) the inscription was correctly structured for the direction of the bust. The weight standard also seems to have slipped slightly, still between 1 and 2g but tending towards the lower rather than the higher end of the range as in the previous phases (Y.C1-i and -ii). The change is relatively small and is hard to assess from the relatively modest sample of coins available.

Y-Q.1 Kidara, third Kidarite ruler in the name of Varahran Kushanshah, c. AD 355–85 (Fig. 3.112)

The coins of the fourth Bactrian series in the name of Varahran have a flat crown with two rows of petals, and ribbons raised above flanking a striped globe. The crown is the same as that appearing on the sealings of a Hun king and ruler of Samarkand with the title Kushanshah found in Swat (ur Rahman *et al.* 2006). The attribution of the gold coins (Y-Q.G1-i) to Balkh is based on the continuity of designs and control marks and the use of Brahmi *ba* (Z.G1-iii and -iv) and Pahlavi *bl* (Z.G1-iv) mint marks on later series in the name of Kidara and of Brahmi *ba* on coins in the name of Orōlano (Z-A.G1-i).

Some of the gold coins in the name of Varahran, with the crown without raised ribbons (Y-O.G1-ii and -iii), seem to be made at the same time (or shortly before or after) as this series as they have the same squiggly line found in many of their inscriptions. The reverse design, although consistently depicting the high god and bull with Bactrian label, had become progressively less well executed, both in terms of die cutting and striking, so that the reverse became increasingly illegible. By the time these and the raised ribbon coins were being issued the gold standard had dropped to about SG 13.6 (*c.* 55% gold).

The Bactrian copper coins with this crown (Y-Q.C1-i) are often badly made and much lighter than earlier issues in this series. Many examples have the bust facing left and illegible inscriptions. No examples have been found with correctly written reverse inscriptions. Thirty examples found by Charles Masson are in his Begram collection (Khan *et al.* 2008, 70; Cribb 2021), suggesting a movement of Bactrian coins into the Begram/Kabul region during the reign of Kidara.

Two examples of copper coins from a second copper mint (Y-Q.C2-i) have been recorded. These coins are in the style of the series struck for the southern Kushano-Sasanian

Figure 3.112 Gold and copper coinage of Varahran Kushanshah with raised ribbon crown, Balkh mint (Y-Q.G1)
Gold dinars and occasional quarters and copper units were issued in the name of Varahran Kushanshah with the usual designs and inscriptions, but with the Kidarite tamga and a crown with ribbons rising above at Balkh. The weight standard of the gold dinar fell slightly to 7.7g, but the copper units continued to fall in weight, dropping from *c.* 1.2g to *c.* 0.6g. Many copper units show the king facing left instead of the normal right-facing bust. Two copper coins in the Kushano-Sasanian series issued south of the Hindu-Kush, perhaps following the issues portraying the Sasanian emperor Shapur II, have been recorded (Y-Q.C2-i), but are not illustrated here.
a) dinar with Bactrian Q inverted in left field (Y-Q.G1-i: 4721 1982,0626.5, 7.63g, 35mm)
b–c) copper units with busts facing right and left (Y-Q.C1-i: 4726 1982,0626.37, 0.57g, 11mm; 4729 1982,0602.28, 1.18g, 12mm)

territory from Peroz I until Shapur II and with the fabric and poorly struck reverses of Shapur II's later copper issues (X.C1-ii), likewise suggesting Kidara's moving into the Begram/Kabul territory south of the Hindu Kush. After the end of the reign of Shapur II, his immediate successors Ardashir II (AD 379–83) and Shapur III (AD 383–8) are thought to have continued to issue silver drachms in the Kabul region (Schindel 2004, 256–7, 273–4) and their 'Kabul' mint silver coins were found with Bactrian gold coins of Kidara (Z.G1) and of his successor Orōlano (Z-A.G1-i) in the Tepe Maranjan hoard (Curiel 1953), again suggesting that Kidara and his successors were in the Kabul region in the late 4th century.

Z–Z-I The end of the Kushanshah coinage from Kidara to the Hephthalites (Figs 3.113–3.114)

Once Kidara had adopted the title of Kushanshah, the Kushano-Sasanian style gold dinar coinage became static in its designs until the capture of Balkh by the Sasanian king Peroz, *c.* AD 467. Until recently it was thought that the coinage after the issues in the name of Kushanshah Varahran became illegible with a continuing sequence of gradually degenerating designs and inscriptions. The discovery of Kushano-Sasanian gold coins (Z-F.G1-ii) in the name of the Sasanian emperor Peroz (AD 457–84) initiated a reappraisal of this coinage (first recognised by Nicholas Sims-Williams, see Errington and Curtis 2007, 89). The results of this reappraisal has confirmed the name of Kidara on the issues (Z.G1-i, -ii, -iii, -iv) immediately after the replacement of the name of Varahran, as had been suggested by Ghirshman (1946, 32, 33, figs 35, 72, 73, 140, pl. VI, nos 5 and 6), but since disputed (Grenet 2002, 206; de la Vaissière 2005, 16). Among the large volume of coins which followed the issues in the name of Kidara, several other names have been discovered: Orōlano (Z-A.G1), Pidoko (Z-B.G1), Tobazino (Z-C.G1), Ōkilano? (Z-D.G1) and Ōzmano? (Z-E.G1), all using the title Kushanshah, and Pirōzo (using the title Shahanshah), both in the style of Kidara's coins (Z-F.G1-i) and on coins showing the king wearing his own crown and holding an arrow and sword (Z-F.G1-ii). The sequence of these coins has been established through the control marks and inscriptions (content, letter forms and abbreviations) appearing on them and their treatment of the design features inherited from the coins in the name of Varahran, such as the shape of the altar, the shoulder ornaments (flames, crescents, none) and ankle ties (two, one or none). Two chronological markers are available for this sequence as silver coins of Tobazino can be dated to the second quarter of the 5th century through overstrikes and because the approximate date of Peroz's occupation of Balkh can be corroborated by historical sources (see Ch. 2 §Y–Z.1–2) and by his coins which show him wearing his second crown as used in the first half of his reign (Heidemann 2015, 331–2 summarises the sources and evidence for Peroz's campaigns in Bactria/Tokharistan).

Another series of Kushano-Sasanian style gold coins (Z-G.G1-i, Z-H.G1-i and Z-I.G1-i and G2-i) follow the issues of Peroz, apparently issued by the Hephthalites who

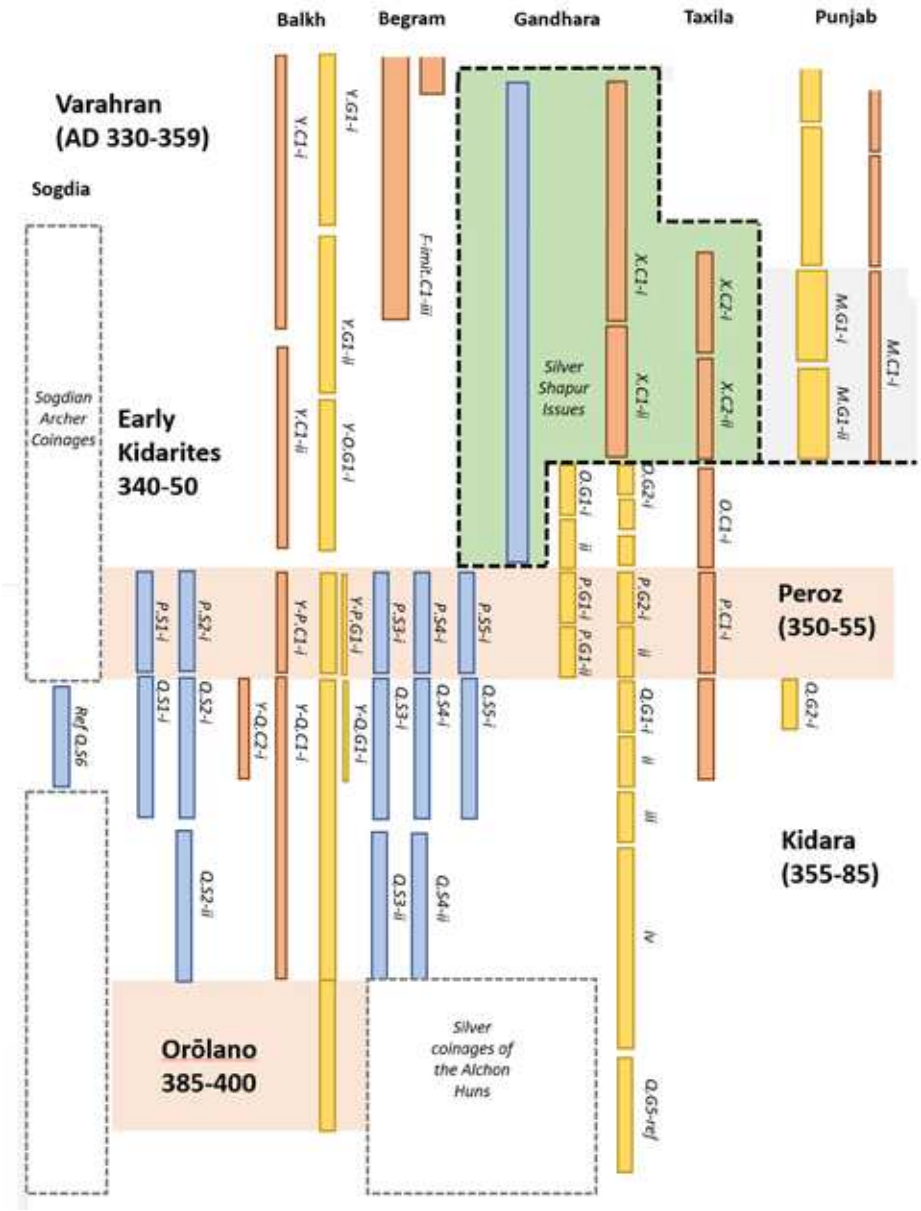


Figure 3.113 Production diagram
Minting diagram showing the succession of Kidarite coinage after the issues of the Kushanshah ruler Varahran

captured Balkh after defeating Peroz. The treatment of the designs differs from the Kushano-Sasanian and Kidarite coins and most of the reverses feature a goddess seated on a lion or are blank. The legible names in Bactrian on these coins are Mehama (Z-H.G1-i) and Adomano (Z-I.G1-i and G2-i) and are also known from Alchon coins issued south of the Hindu Kush (Mehama: Vondrovec 2014, types 62, 63, 71, 73, 74, 316, 317; Adomano: *ibid.*, types 85–7), but the denomination and designs suggest they were issued in Bactria. Mehama is also mentioned as a Hun king in a Buddhist copper scroll dated *c.* AD 492 (Melzer 2006). The recently discovered Bactrian documents include two letters which are from a local king called Meyam (μηιαμο), as a sub-ruler under the Sasanian emperor Peroz in years 239 (AD 465) and 242 (AD 468) (Sims-Williams 2007, 108 and 114; for the AD equivalents see Ch. 2 §Y–Z.1). These letters show the Hephthalites ruling part of Bactria/Tokharistan as subjects of the Sasanian emperor (Alram 2008, 257). If it is the same man, then he rose to a higher position as a king with the authority to issue coins after Peroz lost Bactria in AD 476.

The Bactrian documents also make frequent references to gold dinars (διναρο or δδιναρο) in the period of the Kidarites, Hephthalites and Turks (Sims-Williams and de Blois 2018), but it is possible that later references are to a money of account, even though the documents describe them as 'dinars of struck gold' from year 110 (AD 332) to year 549 (AD 771) (Sims-Williams 2012a, 26, 142) and as 'dinars of gold struck by the king' in year 436 (AD 658) (*ibid.*, 78).

Z.1 Kidara, third Kidarite Hun ruler: in own name as Kushanshah, c. AD 355–85

The coinage struck in the name of Kidara was immense. Although his name can be read on early specimens it became increasingly blundered. The designs continued the basic form that it had reached before Kidara became Kushanshah, but continued to deteriorate in quality of execution, particularly the reverses which were so poorly

struck that the designs can no longer be understood. The coinage can be divided into phases by the use of control marks, by the treatment of the designs (such as the treatment of the ankle ties of the king's leggings) and by spelling and letter forms of the inscription. The inscription was intended to be BAΓO KIΔAPA OOZOPKO KOÞANO ÞAYO (Lord Kidara great Kushan king), but often extra letters in the form of Os were added and the end dropped letters (**Table 3.15**).

Z-A.1 Orōlano, fourth Kidarite ruler, c. AD 385–400

Orōlano is only known from his coins (Z-A.G1). The changing detail and continuity of control marks place him next after Kidara (**Table 3.15**). The inscription BAΓO OPΩΛANO KOÞANO ÞAYO (Lord Orōlano Kushan king) on his coins is the first to omit the title OOZOPKO 'great'. Most of his coins have a tamga in the lower right field; it is similar in form to one of the tamgas appearing on Alchon Hun coins south of the Hindu Kush (Göbl 1967, types 33, 34, 35) and reappears on the coins of Tobazino (Z-C.G1). His gold coins are attributed to Balkh as most of his coins have Pahlavi *bl* or Brahmi *ba* as mint marks. One of his coins was included in the Tepe Maranjan hoard (Curiel 1953, 109, pl. XV, 5 and XVI, no. 12).

Z-B.1 Pidoko, fifth Kidarite ruler, c. AD 400–30

Pidoko is only known from his coins (Z-B.G1) which follow those of Orōlano. His coins are very numerous and generally badly made. The inscription BAΓO ΠIΔAKO KOÞANO ÞYO is often blundered. Like his predecessor some coins have the Balkh mint mark Brahmi *ba*.

Z-C.1 Tobazino, sixth Kidarite ruler, c. AD 430–5

Only three gold coins of Tobazino are known, but all have the Bactrian inscription BAΓO TOBAZINO KOÞANO ÞAYO, more clearly written than his predecessor. His coins all have the same tamga as those of Orōlano, in the lower right field. He is positioned after the coins of Pidoko because he exhibits features which relate his coins more closely to the coins of the next Kidarite king (**Table 3.15**). Tobazino is also known from his Sasanian-style silver coins, inscribed in Bactrian TOBAZINI ÞAO (Vondrovec 2014, type 32) or just TOBAZINI (*ibid*., types 32A, B and C), which use designs derived from the coins of the Sasanian emperor Varahran IV (AD 388–99). Some of his silver coins (*ibid*., type 32A) also feature the same tamga as found on the gold coins. The chronological position of Tobazino is also indicated by the examples of his coins which are overstruck on Sasanian silver coins of Varahran IV and Yazdagird I (AD 399–420). The mint continues to be located in Bactria because one of the surviving coins has the mint mark *ba*.

Z-D.1 Ōkilano?, seventh Kidarite ruler, c. AD 435–50

The coins which follow Tobazino in the sequence of control marks and design features (**Table 3.15**) are inscribed with a name which appears to be Ōkilano, BAΓO ΩKIΛANO KOÞANO OOO. The ends of their inscriptions are a set of round letters, which probably represent ÞAO. The inscriptions are very blundered so the name of this king, who is otherwise unknown, cannot be read with confidence. Very similar coins appear to have the name Ōzmano, which might represent a different ruler or simply a further corruption of the inscription of Ōkilano.

Z-E.1 Ōzmano?, eighth Kidarite ruler, c. AD 450–67

The last series of gold coins with the title Kushanshah, issued prior to the Sasanian emperor Peroz issuing coins in Balkh, seem to have a name Ōzmano, BAΓO ΩZMANO KOÞANO OO. The ends of their inscriptions are a set of round letters, which probably represent ÞA[O]. His name is otherwise unknown and could represent a corruption of Ōkilano rather than a distinct ruler.

Z-F.1 Peroz, Sasanian emperor: a Bactrian interlude, c. AD 467–76 (Fig. 3.115)

Two types of Bactrian gold coin have been recorded inscribed with the name and title of the Sasanian emperor Peroz (AD 457–84) ΠIPΩZO ÞAYO/NANO ÞA[Y]O (Peroz king of kings). The first type (Z-F.G1-i), probably the first phase of his coinage at Balkh retains the Kidarite design, including the details as featured on coins with the names Ōkilano and Ōzmano, but is distinguished by the replacement of the Kidarite tamga with a Sasanian diadem emblem as occasionally used on Sasanian coins since the reign of Shapur I (AD 240–70) and used by Peroz as the main reverse design on a Merv mint copper coin with his second crown type obverse (Schindel 2004, vol. 2, pl. 92, no. A47). The reverse designs of these gold coins are completely obliterated.

The second type (Z-F.G1-ii; Vondrovec 2014, type Peroz, name misread as ΠIOPΩZO) has a new design modified from the Kidarite coinage. The inscription is the same as phase one, but has an added element written in Bactrian within the royal inscription, and is so far completely unintelligible. A standing figure of the king is still the obverse design, but on this issue the king is shown holding a down-pointing arrow in his right hand and his left hand rests on the hilt of the sword at his hip. The treatment of the king's mail skirt is the same as on phase one and on the previous

Figure 3.114 (facing page) Gold coinage of Kidara Kushanshah and his successors, Balkh mint (Z.G1–Z-E.G1)
Gold dinars were issued under the Kidarite Huns from a mint at Balkh in the name of several rulers. The designs are the same as on issues in the name of Varharan, but now feature the names of Kidarite rulers beginning with Kidara. The first such issues named Kidara Kushanshah (Z.G1) and were issued in four phases, distinguished by the crown versions and by changing patterns of control marks. The issues of Kidara were followed by those in the names of four or five Kidarite Kushanshahs, Orōlano (Z-A.G1), Pidoko in three phases (Z-B.G1), Tobazino (Z-C.G1, not illustrated here), Ōkilano? (Z-D.G1, not illustrated here) and Ōzmano? (Z-E.G1, not illustrated here), all in single phases except Pidoko in three phases. Over the course of these issues the reverse design became gradually more unclear, the weight fell and the coins became noticeably more scyphate.
a–b) dinars of Kidara, first phase with petalled crown and fourth phase with tripartite florette crown (Z.G1-i: 4734 1847,1201.265, 7.69g, 34mm; Z.G1-iv: 4737 1989,0625.3, 7.59g, 34mm)
c) dinar of Orōlano (Z-A.G1-i: 4740 1989,0625.4, 7.59g, 34mm)
d) dinar of Pidoko of the second phase (Z-B.G1-ii: 4741 1982,0626.6, 7.41g, 34mm)

	Name	Control marks	Crown	Right hand	Skirt	Altar	Shoulders	Ankle ties	ÞAYO
Z	Kidara	∈ ∴	1	1	1a	1 [1 curl]	flames	double	ÞA
Z	Kidara	crescent on stand	1	1	1a	1 [2 curls]	flames	double	ÞA
Z	Kidara	∈ ●	2a	1	1a	1	flames	double	ÞA
Z	Kidara	⊥	3	1	1a	1 [2 curls]	flames	double	
Z	Kidara	●	3	1	1a	1 [2 curls]	flames	double	
Z	Kidara	∵	3	1	1a	1 [2 curls]	flames	double	
Z	Kidara	×	2a	1	1a	1 [3 curls]	flames	double	ÞA
Z	Kidara	∪ c	2a	1	1a	2a	flames	double	ÞA
Z	Kidara	Brahmi *ba* ❊	2a	1	1a	2a	flames	double	ÞA
Z	Kidara	Brahmi *ba* ❊	2a	1	1a	2a	flames	double	VÞA
Z	Kidara	Brahmi *ba* ❊	2b	2	1a	2a	crescent	double/single	
Z	Kidara	Brahmi *ba* ❊	2b	2	1a	2a	none	double/single	
Z	Kidara	Brahmi *ba* ❊	2a	2	1a	2a	none	double/single	
Z	Kidara	Pahlavi *bl* ❊	2a	3a	1a	2a	crescent	single	
Z	Kidara	Pahlavi *bl* ❊	2a	3a	1a	2a	circle	single	
Z	Kidara	Pahlavi *bl* ❊	2a	3a	1a	2a	none	single	
Z-A	Orōlano	Pahlavi *bl* -tamga	2b	3b	1a	2a	flames	single	ÞYO
Z-A	Orōlano	Pahlavi *bl* -tamga	2a	3b	1a	2a	flames	single	ÞYO
Z-A	Orōlano	Pahlavi *bl* -tamga	2a	3b	1a	2a	flames	lily between	ÞYO
Z-A	Orōlano	Brahmi *ba*	2a	3b	1a	2a	flames	single	ÞYO
Z-B	Pidoko	Brahmi *ba*	2b	4a	1a	2a	none	single	ÞYO
Z-B	Pidoko	Brahmi *ba*	2b	4b	1b	2b	none	single	XO
Z-B	Pidoko	Brahmi *ba*	2b	4a	1b	2b	none	single	ÞYO
Z-B	Pidoko	Ψ	2b	4a	1b	2b	none	single	ÞYO
Z-B	Pidoko	S+	2b	4a	1b	2b	none	single	ÞYO
Z-B	Pidoko	∵	2b	4a	1b	2b	none	single	ÞYO
Z-B	Pidoko	∪V	2b	4a	1b	2b	none	single	ÞYO
Z-B	Pidoko	♣	2b	4a	1b	2b	none	single	ÞYO
Z-B	Pidoko	S	2b	4a	1b	2b	none	none	ÞYO
Z-C	Tobazino	tamga	3	5	2a	2b	none	none	ÞAYO
Z-C	Tobazino	tamga	2b	5	2a	2b	none	single	ÞAYO
Z-C	Tobazino	Brahmi *ba*	2b	4a	2a	2b	none	none	ÞYO
Z-D	Ōkilano	♣	2b	4a	2b	3a	none	single/none	Ooo
Z-D	Ōkilano	∴	2b	4a	2b	3a	none	single/none	Ooo
Z-E	Ōzmano	❊	4	4a	2b	3a	none	none	Oo
Z-E	Ōzmano	∴	4	4a	2b	3a	none	none	Oo
Z-E	Ōzmano	∴	5	4a	2b	3b	none	none	Uo
Z-E	Ōzmano		5	4a	2b	3b	none	none	Uo
Z-F	Peroz	diadem	2b	4a	2b	3b	flames	none	illegible
Z-F	Peroz	diadem	Sasanian		2b	none	flames	none	ÞAYO
Z-F	Peroz	diadem	Sasanian		2b	none	flames	none	ÞAYO
Z-F	Peroz	diadem	Sasanian		2b	none	flames	none	ÞAYO

Key to table codes:

Crown		Right hand		Skirt		Altar	
1	row of petals	1	oval	1a	3 rows	1	V shape
2a	3 florets	2	curve	1b	3 bars	2a	V small base
2b	2a flattened	3a	hook	2a	2 balls + grid	2b	2a distorted
3	3 blocks	3b	longer hook	2b	2 balls + 2 rows	3a	dish top
4	row of dots	4a	closed hook	2b	2 balls + 2 rows	3b	3a distorted
5	flat line	5	open hand	2a	2 balls + grid	2b	2a distorted

Table 3.15 The changing pattern of small design details from Kidara to Peroz

Figure 3.115 Gold coinage of Peroz, Sasanian emperor, Balkh mint (Z-F.G1)
Gold dinars were issued in the name of the Sasanian emperor Peroz (AD 457–484) at the Balkh mint in two phases. The first phase retained the Kushano-Sasanian designs used by the Kidarite Huns, with obliterated reverse, but the second phase showed the king in a different posture holding an arrow and wearing his own crown (Z-F.G1-ii, not illustrated here). Both phases are distinguished from their Kidarite prototype by the replacement of the Hun tamga by a Sasanian diadem device.
a) dinar of the first phase (Z-E.G1-i: 4742 1991,0640.17, 7.42g, 35mm)

Kidarite coins. He is shown wearing his own imperial crown as worn on his second phase of Sasanian silver coins, which are dated to years 2–8 of his reign (AD 458–64) and on undated coins of the same period (Heidemann 2015, 332) or as late as AD 474 (Schindel 2004, vol. 1, 395–8).

Z-G–Z.I Hephthalite/Alchon Hun continuation of gold dinars (Fig. 3.116)

Historical sources (Heidemann 2015, 331–2) record Peroz's defeat by the Hephthalites *c.* AD 476 and his death at their hands in 484 (see Ch. 2 §Y–Z.1). The series of Bactrian gold dinars with Alchon Hun tamgas relate to this period. The issuers Mehama (Z-H.G1-i) and Adomano (Z-I.G1-i and G2-i) are known from silver coins issued south of the Hindu Kush to be Alchon Hun rulers in that region, who according to a Chinese source were subject to the Hephthalites (Song Yun: Kuwayama 2002, 109). Mehama was a local ruler in Bactria while Peroz was still ruling in Balkh (Sims-Williams 2007, 108 and 114), so his coins are likely to come soon after Peroz's loss of Balkh to the Hephthalites in AD 476. Unlike the Kidarite Huns the Hephthalites did not claim the title Kushanshah. Mehama's coin inscriptions give him the remaining titles inherited from the Kidarites: ΒΑΓΟ and ÞΑΟ (lord and king); on his Alchon coins he uses the titles Brahmi *ṣaha* (Vondrovec 2014, types 71 and 316) or *ṣāha* (*ibid.*, type 73A), or none. Adomano uses a grander title ΜΙΙΡΟΣΑΝΟ ÞΑΟ (king of the East), and the same title on his Alchon coins (Vondrovec 2014, types 86 and 87).

A third group of gold coins (Z-G.G1) which seem to come after Peroz are very poor copies of the late Kidarite coins without a legible inscription. Stylistically they seem linked with the period of Mehama's coins.

Z-G.1 Anonymous Hephthalite period issue, c. AD 476–80

A small group of very debased gold dinars (Z-G.G1-i) with a crude copy of the Kidarite designs and a version of the tamga which features the upper half in the form of a Greek omega ω above τ with dots below. The treatment of the figure and crown link them with the Hephthalite Bactrian coins of Mehama. The inscription resembles a crude copy of the coins attributed to Ōzmano?

Z-H.1 Mehama, Hephthalite ruler, c. AD 480–500

Mehama's Bactrian gold coins (Z-H.G1-i) all share the same design and features, so represent only one phase of production. Their obverse designs, based on the Kidarite coins made at Balkh, suggest that they were also made in the same city. The king is shown in the same posture as on Kidarite coins, holding a trident and making an offering at an altar, but the standard above the altar no longer has the three prongs of a trident; just the crescent remains. His dress is still armour with a mail skirt, but his crown is simplified to a row of dots and in place of the sphere above there is a trident in a crescent. The inscription is in a very cursive Bactrian: ΒΑΓΟ ΜΗΥΑΜΟ ÞΑΟ. There is an Alchon tamga in place of the Kidarite tamga in the right field. The reverses are novel and in place of the high god and bull there is a goddess seated on a low throne. The details of the goddess are unclear on all examples, but the design seems to be an adaptation of Kushan Ardochsho, perhaps holding a cornucopia.

Z-I.1 Adomano, Hephthalite king of the East, c. AD 500–20

The most numerous Hephthalite gold coins from Bactria are in the name of the Alchon king Adomano. Two different fabrics were struck: one following the cup-shaped form of the Kidarite coinage (Z-I.G1-i), the other struck on a flat flan (Z-I.G2-i). Otherwise their designs and inscriptions are the same. They differ in the use of control marks. They all have a version of the Alchon tamga with the upper half rendered as a floral motif. The king is represented in the same posture as the Kidarite kings on their coins, but with a *cakra* in place

of the striped globe between the ribbons above his crown, which is simply a flat line. The altar is rendered with a cup-shaped top as on the latest Kidarite coins and the trident above it has no crescent. The Bactrian inscription is written to be read from the outside of the coin: ΑΔΟΜΑΝΟ ΜΙΙΡΟΣΑΝΟ ϷΑΟ (Adomano king of the East). The reverses depict another novel design, showing a goddess seated on the back of a recumbent lion; as on Mehama's coins the goddess seems to resemble Kushan Ardochsho holding a cornucopia, but the details are very unclear. The goddess on lion design is paralleled in Hun and later coins from Kashmir (Cribb 2016b; Cribb and Singh 2017). The cup-shaped coins show all these features, but the flat coins mostly have reverses obliterated by the stamp of the obverse showing through (also a feature of many Alchon silver coins). The two fabrics could represent a chronological progression from cup-shaped to flat, or more likely they could be the products of two contemporary mints.

Conclusion

The continuity of the Kushan and successor coinages is remarkable, with the denomination introduced by Wima Kadphises, the third Kushan king (series C.G1) in the early 2nd century, the gold dinar continuing to be issued for over 400 years. In spite of the vicissitudes of wars and other calamities the standard dinar continued with only a small reduction in weight standard from *c.* 8g down to *c.* 7g, but a more pronounced debasement, from almost pure gold at its inception down to under 40% at its end. A version of the denomination also survived in northern India under the Gupta dynasty, and other gold coinages circulating across northern India for centuries afterwards borrow substantially from the Kushan model (Cribb 2023b). In Tokharistan/Bactria the dinar denomination also survived the end of the issue of coins, as a money of account in the Bactrian documents until at least the mid-7th century (Sims-Williams 2012a, 78).

As we stated in our introduction this account of Kushan and successor coinages continues to change as more evidence comes to light. The silver drachm of the Kushan-Sasanian king Varahran (**Fig. 3.108**) arrived in time to be added in this chapter, but not in the catalogue. Since then a fractional denomination of the same series struck in the name of Hormizd I has also been shown to us by the collector Heinz Bons. Muhammad Khalid, who lives in northern Gandhāra, has also reported hemidrachms from the Kashmir mint in the name of Huvishka and imitations of the same king with Brahmi inscriptions being found in his locality. Recently an inscription of the second Kushan king Wima Takto was discovered in Tajikistan adding weight to the attribution of most of the Soter Megas coinage (B.C1) to his reign (Cribb 2024). Evidence continues to accumulate and will require further study and further interpretation. In the following chapter the story of the gradual accumulation of Kushan and related coins by the British Museum will be laid out chronologically. The changes of the last few decades in international antiquity laws suggest that story is close to its end. The British Museum's collection is in many ways a product of empire, and as that era has long since passed it will increasingly become a static, rather than a growing, collection. However, the increasing engagement with numismatics in the regions where the Kushan kings ruled, and efforts of scholars and collectors in those regions, will ensure that the story of the coinages of the Kushans and their successors will continue to develop.

Figure 3.116 Gold coinage of the Hephthalites, Balkh mint (Z-G.G1–Z-I.G1)
Gold dinars were issued by the Hephthalites at Balkh after the defeat of Peroz, continuing the use of the Kushano-Sasanian design of the Kidarite Huns, at a standard of *c.* 7g, but with a new reverse design, which was poorly executed in both die cutting and striking. The phases are distinguished by the name of the king and details of tamga and crown. The reverses of these Hephthalite issues have new designs depicting Oesho and bull, goddess enthroned or goddess on lion, but, as on the issues they copy, the striking deteriorates rapidly rendering it unintelligible. The first issues retain the dish-shaped flans of the prototypes but these are gradually replaced with flattened flans.
a) dinar of Hephthalites, anonymous issue (Z-G.G1-i: 4743 1894,0506.175, 6.80g, 34mm)
b) dinar in name of Mehama, Hephthalite tamga in place of the Kidarite one and a new crown type surmounted by a trident (Z-H.G1-i: 4744 1991,0101.2, 4.84 (clipped), 28mm)
c–d) dinars of Adomano's first and second phases, crown surmounted by a *cakra* (Z-I.G1-i and -ii: 4745 2000,0508.4, 7.18g, 34mm; 4747 IOC.2354, 6.77g, 28mm)

Chapter 4
The British Museum Collection of Kushan, Kushano-Sasanian and Kidarite Hun Coins

The British Museum collection of Kushan, Kushano-Sasanian and Kidarite Hun coins was mostly assembled as a result of Britain's imperial rule in South Asia. Before the second half of the 20th century the majority of the collection arrived in the Museum as a consequence of the activities of three categories of British collectors: travellers, military personnel and civil servants.

European travellers to Central Asia and India were increasingly common in the early 19th century, largely driven by the ever-increasing interest in the region from European powers, most notably the East India Company seeking to control its north-western frontiers (**Fig. 4.1**).

The earliest significant arrivals came as the result of people travelling into former Kushan territory as explorers or as government agents. Their collecting was driven by antiquarian interest but it was made possible by imperial power. The first of these was Alexander Burnes (**Fig. 4.2**) who travelled through northern Pakistan and Afghanistan on his journey as a British emissary to the Khan of Bukhara (1832–3), but the most important was Charles Masson (the alias of James Lewis), a deserter from the army of the British East India Company, who spent five years (1833–8) in Afghanistan, part of the time as a spy for the Company, and collected thousands of coins there (Errington 1999; 2021a). Many of the coins he found and other discoveries were described and illustrated by Wilson (1841) (**Fig. 4.3**). A small part of his collection reached the British Museum via the East India Company in 1838, 1843 and 1845 (EIC), but the bulk came from the Company's India Museum in 1882 (IOC) which had been closed in 1879 after the Company was dissolved in 1874 and was subsequently broken up by the India Office. A further part of his collection was preserved in the India Office and is now on loan to the Museum from

Figure 4.1 Locations recorded in the British Museum registers relating to the acquisition of Kushan coins. The sites include the location of several battles indicating the connection between military activity and collecting practice

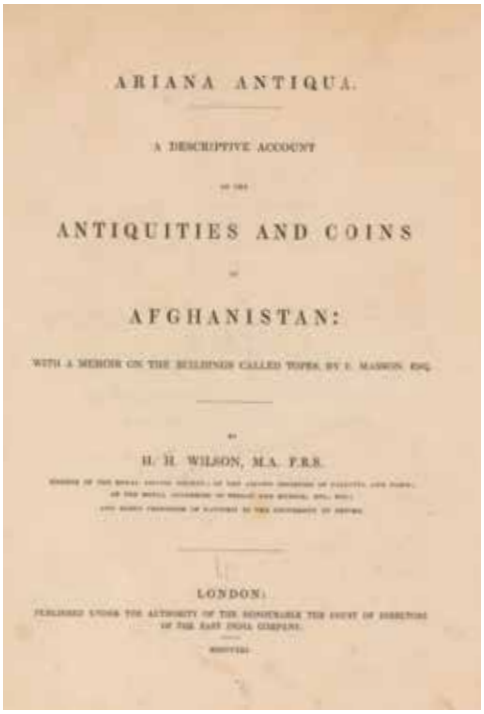


Figure 4.2 (far left) Sir Alexander Burnes, print by Lowes Cato Dickinson, after painting by Sir Vincent Eyre, 1843, based on image made during imprisonment in Afghanistan, 220mm x 102mm. British Museum, 1970,0527.2.2. Eyre wrote an account of the imprisonment, published in London 1843 as *The Military Operations at Cabul: With a Journal of Imprisonment in Afghanistan*

Figure 4.3 (left) Title page of H.H. Wilson's *Ariana Antiqua*, 1841

the India Office Records of the British Library (IOLC). Another part of Masson's collection is in the Department of Coins and Medals of the Fitzwilliam Museum, Cambridge.

The Kushan collection at the British Museum was further expanded as a result of the violent attempt by the East India Company to extend its influence over Afghanistan. Soon after Burnes' and Masson's first visits to Afghanistan, the East India Company sent an army into the region (1839–42). The invasion was unsuccessful, Burnes died in Kabul and Masson survived a siege at Kalat before returning to England. The early part of the campaign saw an influx of Europeans with antiquarian interests and enabled further coin collections to be made. The most important of these for the British Museum was that collected by Lady Sale, wife of one of the army's commanders, who was held prisoner by the Afghans (**Fig. 4.4**). Ultimately this campaign would have a long shadow. The Museum was still receiving donations resulting from that expedition more than a century and a half after it happened. The latest collection entered the Museum in 1996 when a descendant of Brigadier General Sir Henry Lawrence donated the coins which he had collected in the Peshawar region, where he participated in the campaign which resulted in the rescue of Lady Sale.

As well as private collecting facilitated by imperial expansion there was also collecting by a variety of officials working for the East India Company and subsequently for the British Government of India. These collections often served both antiquarian interest and a desire to understand the administered lands and people. The first such collection was that assembled by James Prinsep (**Fig. 4.5**), who worked as a mint official of the East India Company. He built a collection from material passed to him by travellers like Charles Masson (Errington 2017b) and by European officers working for the Sikh army in the Punjab (Lafont 1992; Errington 1995). His collection arrived in the Museum in 1847. In the years before he died in 1840, Prinsep befriended a young officer in the army of the East India Company called Alexander Cunningham (**Fig. 4.6**) and encouraged

Figure 4.4 Lady Sale in prison, print by Lowes Cato Dickinson, after painting by Sir Vincent Eyre, 1843, based on image made during imprisonment in Afghanistan, 271mm x 221mm. British Museum, 1970,0527.2.7

Figure 4.5 James Prinsep, memorial medal by William Wyon, 1840, bronze, dia. 48mm, 55.66g. British Museum, M.6430

Figure 4.6 Portrait of Major-General Sir Alexander Cunningham, print by C. W. Walton, lithographer: Walton & Co. Royal Asiatic Society of Great Britain and Ireland, no. 89-003

him to collect coins. Cunningham went on to become India's first official Archaeological Surveyor in 1861. Throughout his career he continued to collect coins, and just before his death in 1893 and in the following year the bulk of his collection came to the Museum.

The last decades of the 19th century were a key period of acquisition for the British Museum collection of Kushan coins. The arrival of Alexander Cunningham's collection in 1893–4 followed the transfer of part of Charles Masson's collection from the India Office in 1882, bringing more than a thousand Kushan coins to the British Museum, including the majority of the gold coins which are now in the collection. This period of acquisition was matched a century later by the focused acquisitions of Kushan coins from 1980 to 1996 when the Museum purchased a number of coherent parcels of copper coins, many of them published by Joe Cribb (1981a; 1981b; 1985b; 1985c).

These two periods of intense collection resulted from a coincidence of factors. There was an active interest at the Museum in coins from the region ruled by the Kushan emperors by the curatorial staff: Reginald Stuart Poole (**Fig. 4.7**), Percy Gardner (**Fig. 4.8**) and Edward Rapson (**Fig. 4.9**) at the end of the 19th century, and David MacDowall (**Fig. 4.10**), Nicholas Lowick (**Fig. 4.11**) and Joe Cribb (**Fig. 4.12**) at the end of the 20th century. This interest coincided with the opportunities supplied by active collectors and the available funds to do so. They also reflect changes in the way the coins were studied. Poole and those working under his guidance saw the coins as valuable historical sources which could be read as miniature documents. As a result the Museum focused on better quality coins from collectors, especially in gold. Very few of these coins had any provenance information recorded, even though in the case of the Cunningham coins such data must originally have existed. Likewise the process by which Masson built the India Office Collection was largely ignored, better examples being selected out and the bulk of it rejected. By the late 20th century the focus had shifted to seeing the coins as part of a context or system and so they were acquired as parcels which had probably been part, or the whole, of hoards, particularly focusing on reconstructing the system of the copper coinage of the as-yet poorly understood post-Vasudeva period. Curators showed much greater interest in coins that could be related to each other, either associated by hoards or through provenance information. It was in this period that Elizabeth Errington (**Fig. 4.13**) began the process of reconstructing from archives how Charles Masson's material was collected (Errington 1999; 2017b; 2021a).

The Department of Coins and Medals

In 1861 the Department of Antiquities, where coins were held, was broken up into three parts and a competition for the new post of Keeper of Greek and Roman was actively pursued. William Sandys Wright Vaux (1818–85) lost and

Figure 4.7 Portrait of Reginald Stuart Poole, 1860s, by unknown photographer. British Museum Money and Medals Department archive

Figure 4.8 Portrait of Percy Gardner, 1917 by Walter Stoneman. National Portrait Gallery, x20718. Image © National Portrait Gallery, London

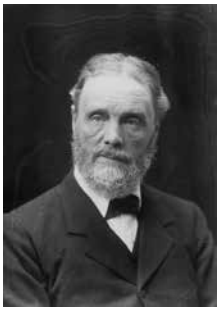


Figure 4.9 Portrait of Edward James Rapson, 1902, by unknown photographer. British Museum Money and Medals Department archive

Figure 4.10 David MacDowall with B.N. Mukherjee in Coins and Medals Department, *c.* 1959, by unknown photographer. British Museum Money and Medals Department archive

Figure 4.11 Portrait of Nicholas Lowick at his desk, by unknown photographer. British Museum Money and Medals Department archive

Figure 4.12 Portrait medal of Joe Cribb 2010 by Linda Crook, bronze, dia. 123mm. British Museum, 2010,4199.1

had to settle for the substantially less glamorous Department of Coins and Medals, to which Reginald Stuart Poole (1832–1895) was also transferred. The period under Vaux's management was rather uneventful for the South Asia collection, with a few minor acquisitions being made, and relatively little else done during the period. In 1870 Vaux left the post and was succeeded by Poole who proved much more energetic. An active programme of catalogues was initiated for the Department. On 6 November 1873 Poole wrote to the Trustees of the Museum with a proposal to publish the South Asian section of the Oriental collection in five volumes. For this purpose the Museum contracted Stanley Lane-Poole, nephew of Reginald Stuart Poole, to undertake the Islamic catalogues. Originally Poole had intended to undertake this himself but most were undertaken by Lane-Poole. Despite this valuable contribution, publishing three volumes in 1884, 1886 and 1892, Stanley Lane-Poole was never employed directly by the Department.

In 1871 Percy Gardner (1846–1937), a specialist in Greek coins and antiquities, was appointed to the Department. Gardner was co-opted by Reginald Poole to prepare the *Catalogue of Indian Coins in the British Museum: Greek and Scythic Kings of Bactria and India* (Gardner 1886), which included some of the British Museum's Kushan material (see below).

Gardner remained an assistant in the Department until 1887, when he was replaced by Edward James Rapson (1861–1937). Unlike Gardner who was a classicist, Rapson was a trained Orientalist and would go on to hold the prestigious post of Professor of Sanskrit at the University of Cambridge from 1906. Rapson completed the fifth volume in the series originally planned by Poole, the *Catalogue of Indian Coins in the British Museum: Coins of the Andhra Dynasty, the Western Kṣatrapas, the Traikūṭaka Dynasty, and the 'Bodhi' Dynasty*, which was published in 1908, two years after he left the Museum and was replaced by John Allan.

It was now apparent that five volumes were not sufficient as the collection had expanded significantly. John Allan published two more catalogues, on the Guptas (1914) and Ancient India (1936). When he became Keeper (head of department) in 1931, his role as Oriental curator was taken over by John Walker (1900–64) whose focus was on Islamic coins. John Walker later became Keeper in 1952, so David MacDowall (1930–2024) was appointed to understudy Walker as Oriental curator in 1956 but left in 1960. MacDowall went on to make a substantial contribution to Kushan studies, particularly on the metrology of Kushan copper coins (MacDowall 1960).

In 1962 the Department appointed Nicholas Lowick (1940–86) as Curator of Oriental Coins. Lowick was employed until his untimely death in 1986, becoming Deputy Keeper in 1979. Although his publications did not cover Kushan coins, he had a keen interest in the subject and encouraged acquisitions.

Joe Cribb joined the Museum in 1970 initially to deal with public enquiries. In his early years at the Museum he developed an expertise in Chinese numismatics. He returned to the activity of cataloguing the collection which had largely ceased in the early part of the century and published a catalogue of Chinese silver ingots in 1992 and of Southeast Asian coin-shaped amulets in 1999 (1999b). His

Figure 4.13 Elizabeth Errington 2024, photograph by Helen Wang

first paper on the Kushans was published in 1981 and since then he has made regular contributions to the study of Kushan, Kushano-Sasanian and Kidarite coins (Bhandare and Garg 2011, 12–23).

Before Joe Cribb's appointment the Museum had employed a single curator to manage all 'Oriental' coinages, i.e. the collections of Islamic, Iranian, East, Southeast, South and Central Asian coins. The last of these includes the Kushan, Kushano-Sasanian and Kidarite coins. In the 1990s–2000s the care of the Museum's 'Oriental' coin collection was subdivided, with separate curators covering East Asian (Helen Wang), Central and South Asian (Elizabeth Errington and Robert Bracey), Islamic (Cécile Bresc, then Paramdip Khera) and Iranian (Vesta Curtis) coins under Joe Cribb. From 2018 to 2024 the Museum employed two permanent curators: Helen Wang, Curator of East Asian Money, and Vesta Curtis, Curator of Islamic and Iranian Coins, who shared responsibility for the other parts of this collection. Today the 'Oriental' coin collections are again under the management of a single curator, Robert Bracey, Curator of Asian Collections.

Publication of the British Museum's Kushan coins

In the 19th century, parts of the collection were often published before they reached the Museum. The material collected by Charles Masson was published by him in reports in the *Journal of the Asiatic Society of Bengal*, edited by James Prinsep (Masson 1834; 1836a; 1836b; Cribb 2007a) and later by Horace Wilson in the volume *Ariana Antiqua* (1841). A large part of that material was sent to the India Office's India Museum in London, and from there a selection went to the British Museum in the 19th century, others arriving in the 20th century (see IOC and IOLC below).

Alexander Cunningham published extensively on coins from India, including articles based on his collection of Kushan coins (Cunningham 1845; 1884; 1888; 1889; 1892; 1893a; 1893b). Just before he died in 1893 his collection began to arrive at the British Museum and the rest came in the following year.

The first British Museum catalogue to include Kushan coins was Percy Gardner's 1886 *Catalogue of Indian Coins in the British Museum: Greek and Scythic Kings of Bactria and India*. He listed 394 Kushan coins in the catalogue. A rough breakdown of material is shown in **Table 4.1**. This was not a complete account. Even comparing his listing with material acquired before 1896 still in the collection it

	Gold/silver	Copper
Kujula Kadphises	1	40
Soter Megas		27
Wima Kadphises	11	24
Kanishka I	33	28
Huvishka	139	58
Vasudeva I	19	9
Kushano-Sasanian	5	

Table 4.1 Kushan coins listed by Gardner (1886)

represents only half the copper, and in Gardner's time those acquisitions probably contained more coins. It also stopped about half way through the material. Only Kushano-Sasanian gold was included and the coins of Kanishka II onwards were ignored.

Gardner did, however, have the opportunity of including in his catalogue a remarkable hoard of 93 Kushan gold coins (from Kanishka I to the third phase of Vasudeva I) presented to the Museum by the Government of the Punjab in 1879. Although Gardner identified the coins which had been transferred from the India Office a few years earlier, when he listed coins from the 1879 hoard, he made no reference to their provenance.

There was a long gap before Kushan coins from the British Museum were again published in detail. Robert Göbl (**Fig. 4.14**) featured British Museum gold coins in his 1957 study of the Kushan monetary system (Göbl 1957). In 1967 John Rosenfield's study of Kushan imperial art featured images and descriptions of 229 Kushan and Kushano-Sasanian coins from the British Museum collection (Rosenfield 1967). Both included a selection of post-Vasudeva material. Michael Mitchiner (see **Fig. 4.36**) published a nine-volume catalogue of Indo-Greek and Indo-Scythian coins between 1975 and 1976. He included in his study the coins of the first Kushan ruler Kujula Kadphises: Heliocles imitations and 'Heraus' types (Mitchiner 1975–6, vol. 4, 298–301 and 304–6), and the rest of his coinage (Mitchiner 1975–6, vol. 8, 675–96). He also included the Mathura 'Soter Megas' coins of Wima Takto (Mitchiner 1975–6, vol. 4, 302). The majority of the coins in these volumes were illustrated from the British Museum collection.

ROBERTVS GOEBL PHIL: DOCTOR VNIVERSITATIS VIENNEN.
NVMISMATICAE VETERIS PROFESSOR ÆTATIS SVÆ ANNO XVI. 57
Dubito, ergo sum.

Figure 4.14 Portrait of Robert Göbl 1961, collage created by Göbl. British Museum Money and Medals Department archive

These were still partial publications. Robert Göbl (1984) made a much larger corpus of Kushan coins, including those of the British Museum, but he excluded the coins of Kujula Kadphises and Wima Takto. His publication was probably the most complete publication of material in the British Museum up to that date.

Cribb (1984b; 1985d) published the collection of Khotanese Sino-Kharoshthi coins with associated Kushan coins in the British Museum. These were republished by Wang (2004). In the 1980s Cribb published several hoard parcels of Kushan and Kushano-Sasanian copper coins from Afghanistan, Pakistan, and Uttar Pradesh, which were acquired by the British Museum (1981a; 1981b; 1985b; 1985c). In 1995 the first publication of the Rabatak inscription included a new typology for the coins of Wima Takto, based on the British Museum collection (Sims-Williams and Cribb 1995–6).

Other articles establishing catalogues of known examples of particular types have been published since, including British Museum coins. These include Kujula Kadphises' 'Heraus' types (Cribb 1993), Kanishka I's Buddha coins (Cribb 1984a; 1985a; 1999–2000), Kushan and Kushano-Sasanian Oesho types (Cribb 1997a) and the gold coinage of Wima Kadphises (Bracey 2009).

The British Museum collection of Kushan coins is amongst the most widely published, in part because efforts have always been made to place it at the disposal of the greatest possible range of interested students. In the late 1980s the British Museum began to employ computers for its internal auditing purposes. This computer system has enjoyed many iterations, initially as Magus, then Merlin, and finally MI+ (a commercial abbreviation rather than shortened form of the Superman villain Mxyzptlk intended to continue the magical theme). The system though originally intended for internal use has been made accessible for public use online and includes records for most of the Museum's Kushan collection and the India Office Loan Collection held at the British Museum (https://www.britishmuseum.org/collection/search?keyword=kushan).

The acquisition numbers

Upon acquisition by the British Museum, coins are assigned an acquisition number. The format of this acquisition number can vary. The most common format is a sequence detailing the year, month and number of the acquisition group, and the number of the object within the group, with a comma (after the year) and a dot (after the month/group number combined) as separators. So 1893,0506.26, a copper coin of Huvishka, is the 26th item recorded in the register of the 6th group of coins acquired in May 1893. This particular group was acquired from Sir Alexander Cunningham, the former Director General of the Archaeological Survey of India. Recently the Museum has changed this format so that the middle four numbers no longer reflect the date and group but instead represent the department and a running number of acquisitions in that year, but most Kushan material was collected before this change.

Figure 4.15 Gold facsimile of Vasudeva I gold dinar (F.G1-iii 1c), made by Peter Speke, Calcutta, *c.* 1805, donated to the British Museum by William Marsden in 1834, 8.27g, 21mm. British Museum, OR.2690 (MAR.1110)

The most common variation from this standard numerical acquisition reference is if the coins formed part of a 'named' collection. In this case the year and the date might be replaced with an abbreviation; for example, IOC.550 represents the 550th coin recorded in the India Office Collection, an imitation of Huvishka. These are usually three letter abbreviations, with some exceptions, for example IOLC for the India Office Loan Collection (a group of coins on permanent loan from the British Library). In some cases a year is used as well; for example, the collection 1838,EIC is referred to as such to distinguish it from another later donation by the East India Company. Sometimes a coin may have been known by its collection in the past but now by a number; for example, coins labelled Lafont in the trays are referred to as 1845,0613 today.

The purpose of this is to provide a unique number for each coin allowing clear and unambiguous references. This has not always been successful as numbers could be duplicated between departments and even sometimes accidentally within departments. Every coin also now has a second number (PRN (COC)), identifying its unique record on the Museum's online collection, known as the PRN (= Primary Record Number). These are usually preceded by a three-letter code identifying the part of the collection; for most Kushan coins this is COC, indicating the collection of Oriental coins (= Collection: Oriental Coins). However, the acquisition number should be the preferred means of referring to an individual coin as it normally provides, at a glance, information about the circumstances under which it entered the collection. If the circumstances of a coin's purchase or donation are of interest to the reader then it is possible to simply look up its acquisition number in this chapter as the acquisitions are arranged in numerical order.

The Museum's earliest Kushan coins

The first Kushan piece the Museum acquired was a facsimile of a Kushan gold coin from the collection of William Marsden in 1834 (**Fig. 4.15**). It had been made in Calcutta about 20 years earlier, replicating a gold dinar of Vasudeva I found locally (Cribb 2007a, 181; Jongeward and Cribb 2015, 307). The first genuine Kushan coins acquired by the British Museum came from the collection of Sir Alexander Burnes in 1835 (1835,BUR) (**Fig. 4.16**). His donation took place during a visit to England in which he published his book *Travels into Bokhara* (1834), recording his travel through northern Pakistan and Afghanistan as an

Figure 4.16 Kushan coins illustrated in Alexander Burnes' *Travels into Bokhara. Being an Account of a Journey from India to Cabool, Tartary and Persia. Also, Narrative of a Voyage on the Indus from the Sea to Lahore*, 1834–5, vol. II, pl. IV opp. p. 455. Coins of Wima Takto (fig. 19), Wima Kadphises (figs 21, 23), Kanishka I (figs 18, 20, 21 26, 27, 30), Huvishka (fig. 25), Vasudeva I (fig. 24), Azes II imitations period of Kujula Kadphises (figs 28–9) and Hindu Shahis (fig. 31). British Museum, Royal Anthropological Library L656699

emissary to the court of Bukhara, as part of the attempt by the British East India Company to take control of Afghanistan and hold back penetration into the area by the Russian empire.

Material collected by Charles Masson (the alias of James Lewis 1800–53) during his stay in Kabul during 1833–8 came to the Museum in 1838, 1843 and 1845 from the East India Company and in 1882 from the India Office. Another notable early donation was made by Lady Florentia Sale (1844,0909) who was captured during the disastrous retreat from Kabul in the First Afghan War. Like the other collections already mentioned these were mixed lots representative of ancient coins circulating in southern Afghanistan and northern Pakistan, and consisting of Kushan, Kushano-Sasanian, Kidarite Hun, Bactrian Greek, Indo-Greek, Indo-Parthian and Indo-Scythian, as well as a fair amount of Sasanian and Islamic coinage.

Between 1838 and 1842 the troops of the British East India Company, under General Sir Robert Sale (Lady Sale's husband), engaged in an unsuccessful war in Afghanistan

Figure 4.17 Portrait of Martin Honigberger, engraving by unknown artist, frontispiece of his *Thirty-five Years in the East. Adventures, Discoveries, Experiments and Historical Sketches Relating to the Punjab and Cashmere*, 1835. British Museum Asia Department R605.H77

(the First Afghan War) with the objective of replacing the government of Dost Mohammed with that of Shah Shuja. The war resulted from British concerns about Russian influence in Central Asia. It was an unmitigated disaster and the sorry tale has been the subject of popular and academic study ever since. The principal interest here is the effect it had on the British Museum collection. For the first time large numbers of Europeans were extensively exposed to the culture of Afghanistan and north-western India (modern Pakistan, Kashmir and the Indian Punjab). Amongst other material, they returned with coins: Indo-Greek, Indo-Scythian, and importantly Kushan. As well as from Burnes, Masson and Lady Sale, coins also came from the collections of officers, such as General Sale (1859,0220) and officers who served under him in Afghanistan, ensign (later General) Haughton (1844,0921) and captains Hay (1860,1220), Lawrence (1996,1030) and Burslem (1851,0205).

British military activity in the region also prompted another source of collecting, as the Company's dealings with the Sikh domain in the Punjab encouraged the Sikh ruler to recruit European soldiers and other specialists to strengthen itself against British interference. These were primarily French officers for whom, in the decades after the Napoleonic wars, the Sikh dominion probably seemed a natural counterbalance to British expansion. Some of these Europeans also collected coins. One early acquisition by the Museum in 1845 was from a Colonel Lafont, a French officer serving in the Sikh army. Another came in 1835 from Johann Martin Honigberger (**Fig. 4.17**) who was in Afghanistan from 1832 to 1835, between two periods of service at the court of the Sikh ruler Ranjit Singh (Honigberger 1852; Errington 2007, 213–16). In 1835 he was in London and tried, unsuccessfully, to sell some of the material he had taken from stupas in Afghanistan to the British Museum, though the Trustees only acquired 24 of his coins (1835,0901). Other material collected by European officers in the Sikh army, Jean-Baptiste Ventura and Claude-Auguste Court, came into the collection later via the collections of James Prinsep (1847,1201) and Alexander Cunningham (1857,0813 etc.) (Errington 1995).

Alongside the collections formed in Afghanistan and north-western India the Museum was also receiving coins in this early period from northern India. Three donations are recorded, two from the East India Company (1838,EIC and 1843,0718; apparently coins forwarded to India from Masson's collection) and one from Edward Law, First Earl of Ellenborough (then the Governor-General of India; 1843,0721 and 1843,0812). Given that Law was in Gwalior at the time of the donation commanding military operations he cannot have made the donation himself. The registers of the period rarely record much information either about the donors or the coins or about the circumstances under which they were collected. It seems plausible that Law, who had been responsible for Burnes' mission to Afghanistan and Bukhara, was probably instrumental in all three donations.

What is unclear is the extent to which the Museum took an active role in acquiring such objects at the time. William Sandys Wright Vaux (1818–85), an Assistant Keeper in what was then called the Department of Antiquities (1841–61) and later the first Keeper of Coins and Medals (1861–70) made purchases of ancient coins, which occasionally included Kushan or Central Asian pieces (1836,0600 and 1837,1030) from Mr Mathew Young (1771–1837), the son of Henry Young, a dealer in coins and medals and a producer of restrikes and tokens based in London. These included Kushan material but it is unclear if the coins were specifically selected or arrived with other material.

List of acquisitions by date

The following list details the acquisitions to the collection in chronological order, identifying each source of acquisition with a brief account of the person or institution from whom the material was acquired. Further acquisitions from the same source are listed in sequence, but cross-referenced to its first occurrence, where details of all the relevant acquisitions are to be found.

Some general biographical sources are used repeatedly throughout this chapter. These include biographical data from Wikipedia, from Buckland (1906), Manville (2009) and Helen Wang's online biography of scholars associated with the Royal Asiatic Society (2011). These resources are indicated simply as Wikipedia, Buckland, Manville and Wang, without further information as page and website references should be self-evident.

A number of general books on the history of the Museum and its collections have been used throughout (Caygill and Cherry 1997; Hill 1922b; Wilson 2002).

Sir Alexander Burnes
1835,BUR
Burnes (1805–41), an East India Company soldier who made an expedition to Bukhara, visiting Punjab and Afghanistan en route in the early 1830s, collected Kushan and other ancient coins in northern Afghanistan and around the Buddhist site at Manikyala, near Rawalpindi in the Punjab (Burnes 1834). This appears to be the first collection of Central Asian coins received by the Museum. It contained Indo-Greek, Indo-Scythian and Kushan material.

Johann Martin Honigberger
1835,0901
Honigberger (1795–1869), born in Kronstatdt in Transylvania, travelled overland through Persia to the court of Ranjit Singh in the Punjab where he served between 1828 and 1832 in an eclectic mixture of roles as physician, distiller, and gunpowder maker. On his journey back to Europe he travelled through Afghanistan and excavated local Buddhist monuments, recovering objects (Honigberger 1852, vol. 1, 61 and 62) which he later tried to sell to the British Museum.

His interest in antiquities, particularly coins, was long standing. He began collecting in Turkey, lamenting that he had not been fully aware of the value of the objects he could procure at low prices (Honigberger 1852, vol. 1, 4). He was already actively purchasing coins in Syria in the 1820s before he arrived in India (1852, vol. 1, 19).

In his autobiographical writings he referred to a Dr Allen, Governor of Gujarat, spending his time in the concoction of fake coins (1852, vol. 1, 57), and, though it is hard to tell how much confidence should be placed in Honigberger's account, the British Museum was receiving fake coins almost as early as it received the real thing (see below for Colonel Lafont 1845,0613).

He published some of the coins he collected upon his return to Europe and made various attempts to sell them. Edward Hawkins, then Keeper of the Department of Antiquities, made efforts to procure them, including at least one coin of Wima Kadphises. He failed and Honigberger eventually sold both to the Parisian dealer Rollin for 3000 francs (Honigberger 1852, vol. 1, 61). However, a group were acquired by the Museum in 1835. In 1886 Rollin (1886,0302) sold a Wima Kadphises gold coin to the British Museum, which could perhaps have been one of the coins originally collected by Honigberger.

Mathew Young
1836,0600; 1837,1030
Young (1771–1837), the son of Henry Young, was a dealer in coins and medals and a producer of restrikes and tokens (**Fig. 4.18**). In the early decades of the 19th century he purchased extensively at auctions and sold some of this material to the British Museum. He sold various mixed parcels to Mr Vaux, amongst which were occasional Kushan coins.

Figure 4.18 Advertising token of Mathew Young, 1798, made by John Milton, issued by Mathew Young, bronze 27.46g, dia. 36mm. British Museum, SSB,192.139.2

East India Company
1838,EIC; aka 1838,0210
The East India Company's donation to the British Museum consisted of a variety of Indo-Greek, Indo-Scythian, Indo-Parthian and Kushan examples, probably from material collected by Charles Masson (Errington 2021a). The register records are incomplete, and at least two gold and a significant number of copper coins have become separated from their records. Another donation of coins collected by Masson was made in 1845 (1845,EIC), but did not include Kushan coins. (See also 1843,0718.)

Anonymous
1843,0512
Two coins with this registration number are in the collection, but no corresponding entry is found in the register. While unusual this is not entirely unknown and may result from loss of paperwork or through the wrong numbers being recorded.

East India Silk Company
1843,0718
A group of nine coins was purchased from the East Indian Silk Company including a copper coin of Menander and an Azes coin as well as six Kushan examples. One [Wima?] Kadphises, and one Kanishka I, are no longer traceable in the collection. This entry is typical of the problem caused by brevity in many of the older registers. It seems most likely that this somehow refers to the East Indian Company as the coins look like the sort of material being collected by Charles Masson. The company was involved in silk trade and there are no traceable contemporary references to such an East India Silk Company. It is certainly not connected with the company of this name operating today from Salem, Massachusetts.

Lord Edward Law **(Fig. 4.19)**
1843,0721; 1843,0812
Edward Law, First Earl of Ellenborough was strongly involved in the management of the East India Company as President of its Board of Control 1828–30 and 1834–5. In 1832 he was responsible for sending Alexander Burnes to Lahore and on to Central Asia. In February 1842 he was appointed Governor-General of India and held the position until June 1844. At the time of these donations he was conducting operations in Gwalior so the coins were

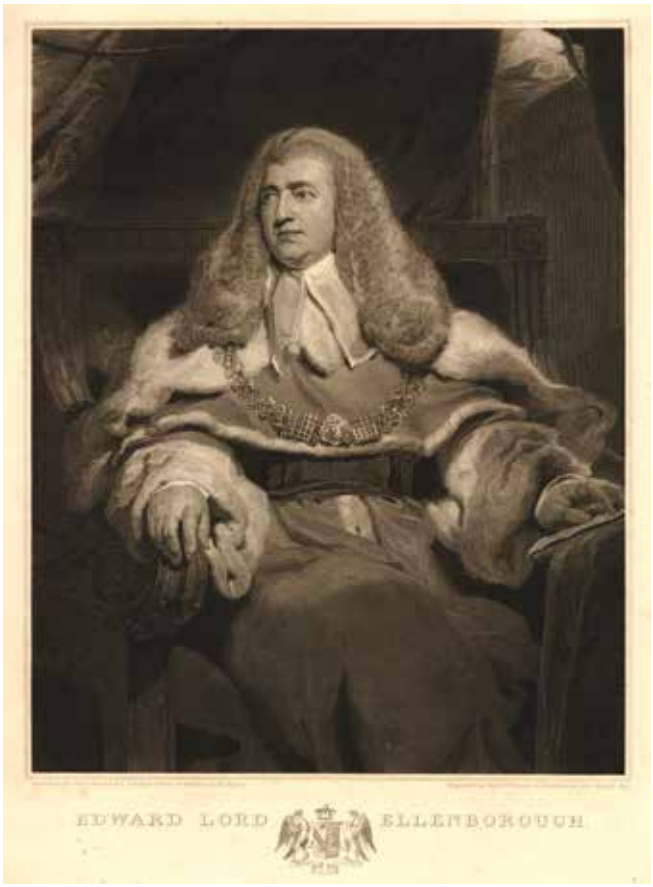


Figure 4.19 Portrait of Edward Law, First Earl of Ellenborough, 1819, print by Robert William Sievier, after painting by Sir Thomas Lawrence, published by Robert Cribb, 543mm x 415mm. British Museum, 1841,0809.136

Figure 4.20 Portrait of Lady Florentia Sale, 1845, print by Richard James Lane, after painting by Maria Mosely, published by H. Graves, 208mm x 183mm. British Museum, 1914,1215.172

presumably presented on his behalf by Major [Thomas Best] Jervis, an engineering officer with an interest in antiquities and surveys, mentioned on several of the tickets (Markham 1871, 76, 86).

It is unclear how the donations from senior company figures, agents such as Burnes, and those from the EIC are related. The register records 46 coins donated in July 1843, including some coins of Kujula Kadphises, four of Wima Takto, two of Wima Kadphises, four of Kanishka I, and nine of Huvishka, though only four are traceable in the collection today. The presence of Kujula Kadphises' coins suggests a source in the north-western India or Afghanistan, where his coins circulated.

Lady Florentia Sale **(Fig. 4.20)**

1844,0909

Lady Sale (1790–1853) was the wife of Major General Sir Robert Sale, commander of the East India Company troops in Afghanistan (1841–2). She was captured and held in Kabul, following the slaughter of the British force. Her Kushan coins were donated as part of a larger collection of ancient Afghan coins.

Lady Sale was with her husband in Kabul, 1840–1. During the disastrous British retreat in January 1842, she was captured by Akbar Khan, along with other women and children, and taken as far as Bamiyan. Her party bribed their Afghan officers to secure release, and were recovered by Sir Richmond Shakespear in September 1842. Her diary, which she had kept throughout, was published as *A Journal of the Disasters in Affghanistan* (Sale 1843). Lady Sale remained in India after the death of her husband in 1845 and died at Cape Town, July 1853. In 1857 a collection of coins said to come from her husband was acquired by the Museum from a Mrs Brind (1857,0220, see below).

John Shepherd

1844,0916

Shepherd (1792–1859), a former naval captain, was a Director of the East India Company over a long period (1830s–1851) and in the year of this acquisition its Chair. Six mixed Indian and Bactrian coins were purchased from him.

John Colpoys Haughton **(Fig. 4.21)**

1844,0921

General Haughton (1817–87) served as an East India Company officer who was active in Afghanistan during the First Afghan War (Yate 1900, 28–52). He fought as an ensign, then lieutenant, under Captain William Hay (see below, 1860,1220). His Kushan coins came from a group of ancient to early Islamic coins purchased from him for £50.

Achille or Auguste Lafont

1845,0613

Lafont presented 145 coins to the Museum, but it is not clear from the records whether it was Colonel Achille or Colonel Auguste Lafont (both brothers were military commanders in

the army of Ranjit Singh in the 1830s). Little is known about them other than they were amongst numerous French officers who served under Ranjit Singh, acting as commanders and military advisors to his army, between 1822 and 1849. Jean-Marie Lafont (1992, 38) has documented this period in some detail. It is worth noting that one of the Lafonts (Captain Auguste de la Font) took part in Ranjit Singh's campaign to Peshawar (Pearce 1898, 351–2).

Losses to the collection

There are two records of Colonel Lafont's coins. The register of coins and medals records that 145 coins were purchased for £300 on 13 June. The coin catalogue of the same year gives details of 71 of these coins and suggests they were acquired on 29 May. There are six Sasanian coins, 23 mostly silver Bactrian and Indo-Greek – though two of these, nos 28 and 29 are recorded as 'Su-Hermaeus', i.e. Kujula Kadphises. There are 38 Indo-Scythian and Indo-Parthian of which the majority are recorded as Azes. No. 67 was a Wima Kadphises gold dinar (chariot type); 68, 69 and 71 were apparently copper tetradrachms of the same king. No information is recorded about the remaining coins, which erroneously suggests they are all Kushan. In fact they were a mixture typical of Afghanistan or north-western India. Of these 81 coins only 29 relating to the Kushans can be traced.

It is not unusual to find discrepancies between the registers and the collection and there are several reasons. Forgery was a serious issue in the 19th century. For example, coin 67 is listed in the catalogue as 'doubtful' (**Fig. 4.22**). A rubbing of this coin was made by Court and the forgery is based on a drawing prepared by Prinsep (1835, 631–3, pl. XXXVIII, 1); the details have been discussed by Errington (1995, 415, 421 and 423). A small but significant number of forgeries were acquired by the British Museum through various collections (**Fig. 4.23**).

In a lot of cases the records are incorrect or misleading. No. 72 is from Chach, while 92 is a coin of Hermaeus and 107 is Hunnic. The failure to record beyond no. 71 in the collection is not to be taken as meaning that all the remaining were Kushan. Sometimes attributions are incorrect. Coin 41 is recorded in the original registers as a coin of Azes, though it is correctly described and in fact is an issue of Kujula Kadphises.

Figure 4.21 John Colpoys Haughton, print by Lowes Cato Dickinson, after painting by Sir Vincent Eyre, 1843, based on image made during imprisonment in Afghanistan, 105mm x 162mm. British Museum, 1970,0527.2.22

A very common reason for discrepancies is that the coin has become separated from its ticket at some time and so has been assigned a 'supplemental' number (see OR below).

In addition to record-keeping issues some coins have been removed from the collection. In the 19th century there was a practice of selling duplicates to raise funds for further acquisitions and in the 20th century the Museum exchanged duplicate items with collectors and institutions (under the terms of the British Museum Act 1767, 1863, §5a) until the mid-1980s when the practice was stopped. This probably explains why coin 29 is still to be found but coin 28 is not.

There have been some destructive losses as well. In 1941 the Coins and Medals Department was hit by a bomb (Hockenhull 2012). Most of what was destroyed were electrotypes but a small part of the Indian collection was present at the time. Among the surviving debris many coins were fused together into lumps by the melting lead, and others were coated in ash and molten material. Coins of Wima Kadphises and Kanishka II are visible in one of these lumps and 12 Kushan coins have since been identified in the loose material (**Fig. 4.24**). It is hard to estimate exact figures of the losses, but more than a thousand copper (or debased silver) South Asian coins have been recovered from the debris, and all have lost the paper tickets which identified when and from whom they were acquired.

Figure 4.22 Gold forgery of a dinar of Wima Kadphises, copied from an etching based on a drawing of a genuine example (catalogue no. 604) by James Prinsep (1835, 631–3, pl. XXXVIII, 1). A rubbing of this forgery was made by Court as has been discussed by Errington (1995, 415, 421 and 423, fig. H). British Museum, 1845,0613.67, 7.92g, dia. 22mm

Figure 4.23 1870 Gold forgery of a dinar of Vasishka (H.G1-iii 1d, 3C/1a), also copied from an etching based on drawing of a genuine example by James Prinsep from Jean-Baptiste Ventura's collection (1835, 631–3, pl. XXXVIII, fig. 11) (cf. catalogue no. 3253, Prinsep's fig. 12. British Museum, IOC.576, 6.23g, dia. 21mm

Figure 4.24 a) Congealed mass of copper alloy coins containing coins of Wima Kadphises and Kanishka II retrieved after fire bomb, 11 May 1941, 8.50kg, 390mm x 270mm x 105mm. British Museum, E.5226;
b) Kushan copper coins (OR.12077) rescued from the fire bomb damage:
1. Wima Kadphises tetradrachm (C.C1-ii) 14.64g, 27mm
2. Huvishka tetradrachm (E.C1-iii) 11.14g, 23mm
3. Vasudeva I (F.C1-iii) 8.68g, 23mm
Nine other coins can be identified as Kushan, but the details are not clear enough to attribute them to a particular series

Figure 4.25 Portrait of Sir Henry Bartle Edward Frere, 1881, oil painting by Sir George Reid, 1295mm x 965 mm. National Portrait Gallery, London, NPG 2669

Henry Bartle Edward Frere
1846,1027 **(Fig. 4.25)**
Frere was a British civil servant in India, where he served from 1834 to 1867 and founded Pune College in the Deccan (O'Connor 2002). A mixed group of 18 coins including Greek, Azes and Sasanian as well as two Kanishka I coins were presented by him.

John Robert Steuart
1847,0309
Steuart lived in the Levant and then in Naples for some years. The British Museum purchased some of his coins from the auctions of his large collection of Greek and European coins. Some of his coins were also in the collection of the East India Company and ultimately reached the British Museum in 1882 (see below, IOC) (Wilson 1841, 238–40). Steuart was the brother of Colonel Claude Scott Steuart who served in India and also donated coins to the Museum (1848,0803).

William Murphy
1847,0421
The Museum paid £30 for 87 coins to a Mr Murphy. As with many names in the register, this is far too common to identify the individual. Ten of these coins were recorded as 'Indo-Sasanian' and three of those appear in this catalogue as Kushano-Sasanian copper issues. His coins were sold to the Museum via Professor James MacCullagh (Trinity College, Dublin).

James Prinsep **(Fig. 4.26)**
1847,1201
The collection of James Prinsep (1799–1840) was purchased for £500 from his executors. A protégé of the Sanskritist Horace Wilson, he was one of the pioneers in the decipherment of India's ancient scripts, Brahmi and Kharoshthi (Salomon 1998, 204–13). The collection, which contained 2642 coins and an unspecified number of forgeries, was assembled by Prinsep while he lived in Calcutta, where he worked for the East India Company's Calcutta Mint and was Secretary to the Asiatic Society. Those numbered from 147 to 311 are identified as Kushan, but many others labelled as 'Bactrian' are issues of Kujula Kadphises. It is likely, however, that some of these attributions were incorrect as only about 90 Kushan coins in the current collection are associated with this donation.

Figure 4.26 (far left) Portrait of James Prinsep, 1838, print from drawing by C.G., 171mm x 129mm. British Museum, 1870,0514.1977

Figure 4.27 (left) 'Our Eastern Policy', cartoon portrait of Sir Henry Creswicke Rawlinson 1873, by Spy (pseudonym of Leslie Ward), from *Vanity Fair* magazine, 321mm x1 86mm. British Museum, 1954,1103.304

Prinsep published numerous numismatic articles in the *Journal of the Asiatic Society of Bengal* while he was its editor, and is rightly thought of as one of the founding fathers of Indian numismatics (Cribb 1997b, 109–11). These were collected into a single volume by Edward Thomas in 1858 (see below, 1850,0305). Three albums of his papers, prepared by his brother Henry Toby, are in the Heberden Coin Room, Ashmolean Museum, Oxford.

Claude Scott Steuart
1848,0803

A group of 325 coins was purchased from Steuart (1797–1860), the seventh son of David Steuart Lord Provost of Edinburgh, who was a resident of Bombay for some time. The four Kanishka coins may have been acquired while he was in India; the other coins acquired with this group are Iranian, from Arsacid to Sasanian, with some Indo-Parthian (Howorth 1905; Whitehead 1999).

Maximilian John Borrell
1849,1107; 1852,0903

Borrell, a London coin dealer, was the son of the London watch maker John Henry Borrell. Maximilian continued the family trade as a watch and clock maker in London (National Archives MS 11936/548/1231029) and published occasional articles in the *Numismatic Chronicle* in 1853, 1855, 1862 (Kagan 2015). The source of this material was probably his brother, resident in Smyrna, whom Maximilian refers to only elliptically (Whitehead 1999). Both groups of coins, 63 and 404, consist mostly of Greek material, with occasional other items, including Kushan coins. They were sold to the Museum for £61/5s and £392/3s/6d.

Edward Thomas
1850,0305

1949 Indian coins were purchased for £300 from Thomas (1813–86), including a modest number of Kushan coins. He went to India in 1852 where he was Judge of Sagar, retiring in 1872. Thomas was Treasurer of the Royal Asiatic Society for 25 years and a noted numismatist. His book on Delhi Sultanate coins (1871) states that coins from his own collection pictured in plates I–V are now held at the British Museum but that a small number remained in his own collection (Buckland; Manville). Thomas was also responsible for publishing the collected works of James Prinsep (Thomas 1858), often interjecting into Prinsep's articles his own observations on Indian and Central Asian coinage.

Sir Henry Creswicke Rawlinson **(Fig. 4.27)**
1850,0412

General Rawlinson entered the army of the East India Company in 1827 and served in Iran, and followed Masson as the political agent in Kabul (1839–42). He returned to Great Britain after further service in the Middle East, became a Member of Parliament, and sat on the Council of India. He became a leading expert on ancient Iran and later President of the Royal Asiatic Society (Errington and Curtis 2007, 5–7). A rare gold dinar of the Kushano-Sasanian king Hormizd I was included in the large collection of Iranian coins he sold to the British Museum.

Mr Knutt
1850,1130

171 Indian coins were purchased for £60 from Mr Knutt about whom no information is available.

Rollo Burslem
1851,0205

A single gold coin of 'Wima Kadphises' purchased from 'Captain Burslam [sic]', reportedly from 'Moultán'. Burslem wrote an account of his travels in Afghanistan soon after the First Afghan War, in which he had served as an officer in the 13th Prince Albert's Light Infantry. He described a gold coin

Figure 4.28 Portrait of Hon. Emily Eden 1835, watercolour and pencil by Simon Jacques Rochard, 361mm x 261mm. National Portrait Gallery, NPG 6455

with details matching the register entry for the coin he sold to the Museum: 'No. 9. A gold coin, supposed by Lady Sale to be a Kadphises. The legend begins with Amokad and ends with Korano. On the reverse is a naked figure, with the right arm stretched out. A few specimens, but in copper, have been found in the barrow at Maunikyala in the Punjaub. Lady Sale considers this coin to be a great beauty and of value' (Burslem 1846, 239–40). However, the illustration (*ibid*., plate opposite 157, no. 9) is of a quarter dinar of Kanishka I, and the coin in the British Museum matches his drawing (no. 739). Burslem was a keen coin collector, but we have no knowledge of what happened to the rest of his collection. Burslem is one of the few individuals who wrote about his coins and even remarked of his Afghan travels 'one of the principal objects I had in view … was to procure coins …' (*ibid*., 154–5).

1852,0903 see 1849,1107 (Maximilian John Borrell)

Hon. Emily Eden **(Fig. 4.28)**

1853,0301

In 1853, 1678 coins were offered to the Museum by Emily Eden, the sister of George Eden, Earl of Auckland, including a modest number of Kushan coins. Auckland had been Governor-General of India from 1836 to 1842 during the First Afghan War. Though the whole collection was offered, only a selection of it was purchased for £250. The remarks written in the register are particularly disparaging regarding the punch-marked coins and their cast successors, stating 'Ten bad casts from above in copper rejected. I believe them to be ancient casts – but they are worthless'. The offered collection contained nearly two hundred Kushan coins but most have been marked in the register as duplicates and were probably either declined or exchanged at a later date.

George Edward Hollings

1855,0608

A mixed group of Indian coins were presented by Major Hollings, including nine Kanishka and five Soter Megas coins. Thirty-three of the coins in the register were marked as 'rubbish or duplicates' and it is possible they were either returned or subsequently exchanged. The donor was probably Major George Edward Hollings, the Deputy Commissioner of Shahpore in the Punjab (Andrew 1856, 42), who died during the uprising of 1857.

W. August Langond

1855,0820

A group containing 16 Greek silver/copper coins and one of Wima Kadphises was purchased from Langond, about whom nothing else is known. The Wima Kadphises was earlier illustrated by Prinsep (1835, 631–2, plate XXXVIII, no. 2) with another coin (see 1886,0302) which he said was collected by Colonel Smith in Benares (Varanasi). This was probably the artist Robert Smith who served with the Bengal Engineers from 1805 to 1830, the same unit as Alexander Cunningham (see 1857,0813). Smith was in Benares during his service as his painting of the city's Aurangzeb mosque is in the British Library collection (WD2089).

Sir Alexander Cunningham

1857,0813; 1888,1208; 1890,0404; 1893,0506; 1894,0506; 1894,0507

Alexander Cunningham (1814–93) joined the Bengal Engineers in 1833. Though he was not involved in the Afghanistan Campaign he was part of Ellenborough's Army of Exercise and fought at the Battle of Punniar against the Marathas in 1843.

Major-General Cunningham retired in 1861 and was appointed as the first Surveyor General of the Archaeological Survey of India, serving from 1861 to 1865 and again from 1871 to 1885. During this time he oversaw the production of annual reports for the survey. Throughout his life he was exceptionally prolific in his writings, amongst which are the earliest systematic accounts of Kushan coinage published as part of a series of articles in the *Numismatic Chronicle* in the years 1888, 1889, 1890, 1892 (see Bibliography; Chakrabarti 1888, 48–107; Michon 2010b).

The British Museum purchased several selections of coins from Cunningham over the years, but the largest, divided into two groups, was a bequest received after his death, in 1894. In total these donations represent about 600 Kushan coins currently in the collection, about half of the total collection in 1894 and approximately one-eighth today (Manville; Wilson 2002, 174–5).

Sir Robert Sale (via Mrs Henrietta Sarah Brind) **(Fig. 4.29)**

1859,0220

A group of 159 coins was purchased from Mrs Brind. Most are Afghan or Persian but a small number were Kushano-Sasanian types. The coins are described in the register as

having come from Mrs Brind's father General Robert Henry Sale (1782–1845) who commanded the garrison at Jalalabad during the First Afghan War. He was the husband of another donor, Lady Sale (see above, 1844,0909). Mrs Brind was the widow of Colonel Frederick Brind, Bengal Horse Artillery (1802–57).

Henry Osborne Cureton
1857,1202
A single early Kidarite coin (see O.G1-iii), initially misidentified as a coin of Samudragupta, was purchased from antiquities dealer Henry Osborne Cureton (Westgarth 2009, 83).

Mrs Brereton
1859,0301
A parcel of 127 coins, including Bactrian and Indo-Greek, Indo-Scythian, Indo-Parthian coins, a single Kushan coin of Wima Kadphises and small numbers of later coins down to the Mughals, were purchased from Mrs Brereton for £72/11s. Nothing is known of her, but she could be a relative of Robert Maitland Brereton, a railway engineer who worked in India from 1855.

William E. Hay
1860,1220
A collection of 630 coins purchased from Major William E. Hay (1805–1879), a veteran of the First Afghan War, where he served as a Captain of the Gurkha regiment. It is possible that part of his collection was collected in Bamiyan. The collection included Bactrian, Indo-Greek, a large number of Indo-Scythian coins, down to the Mughals. At least two coins of Kujula Kadphises and 18 of Kanishka I are recorded. Non-numismatic parts of his collection were purchased in 1880 and his papers are in the British Library. Other coins were sold at auction (Sotheby, Wilkinson & Hodge, 8 April 1880, *Catalogue of Valuable Greek Coins, Consigned from Constantinople; Valuable Military and Naval War Medals; Greek, Roman and English Coins, Formed by the Late Major Hay*).

Count John Francis William de Salis
1862,1004
Two Kushano-Sasanian coppers were acquired amongst a collection of Sasanian coins presented to the Department by de Salis (1825–71). De Salis worked regularly in the British Museum in the early 1860s, organising the collection of Roman coins for the first time (Bendall 2002). He donated, purchased or arranged the donation of a very large number of coins. In this case the coins are recorded as coming from the 'Ismail Pasha collection'. It seems unlikely that this was the Egyptian ruler of the period, but may be a Hungarian soldier, György Kmety (1813–65), who retired to London in 1861 having served under that name (Wikipedia).

R.H.A. Stubbs
1865,0803
Ninety-four Indian coins of various sorts, of which three were Kushan, were purchased from Captain R.H.A. Stubbs for £40. Stubbs became a Fellow of the Royal Numismatic Society in the same year but nothing else is known about him (*Proceedings of the Royal Numismatic Society* 1865).

Figure 4.29 Portrait of Sir Robert Sale 1846, by Richard James Lane, printed by M. & N. Hanhart, published by John Dickinson, 213mm x 163mm. British Museum, 1870,1008.1066

John William Burgon
1865,0810
A group of coins was presented by Burgon (1813–88), a founding member of the London Numismatic Society and the son of Thomas Burgon who worked in the Museum's Department of Antiquities. According to the tickets the coins were presented on behalf of a Major Reynolds about whom there is no information. No record of the original donation has been located (Manville). Probably this is Major William Reynolds, Bombay.

Charles Seton Guthrie
1866,1116
A single coin of Kanishka was purchased from a Colonel Guthrie (1808–1875) for £10. During his time in India, Guthrie developed a particularly large collection of coins and other antiquities; the coins were ultimately sold to the coin cabinet in Berlin (Evans 1875, 12–13), and Mughal jades to the Victoria & Albert Museum (Strong 1993). This particular coin, which appears with another acquired from the India Office Collection as catalogue numbers 14 and 15 in Gardner's account of the British Museum, does not feature in this catalogue (Gardner 1886), the reason being that, despite the high price the Museum was willing to pay to acquire its first example of the god Lrooaspo, this is in fact a

19th-century forgery. These early die-made forgeries are quite adept, though here given away by the rather heavy-handed detailing on the horse and the king's tunic.

James Woodhouse

1866,1201

Woodhouse (d. 1863) was the Treasurer General of the Ionian Islands and then a resident of Corfu. He assembled a large collection of antiquities which was bequeathed to the Museum on his death. It contained 5668 coins, mostly Greek (Manville).

Lord William Willoughby Cole

1867,1218

Thirteen coins were purchased from Cole, the Third Earl of Enniskillen (1840–86), who was principally a collector of medieval and post-medieval coins, but this purchase included three Kushan and a single Gupta gold coin (Manville).

K.M. Nicholson

1871,0507

One Huvishka and five Nawabs of Oudh purchased from Nicholson, about whom no further information is available. Perhaps this Nicholson was a relative of Brigadier General John Nicholson who had fought in the First Afghan War and died during the uprising of 1857.

Dr Pringle

1874,0504

A donation of a single Kanishka tetradrachm was made by Dr Pringle, who may be A.T. Pringle, a civil servant in Calcutta and a member of the Royal Asiatic Society (Wang).

Chanda Mall

1874,0709; 1879,0401; 1890,0105; 1890,0502; 1890,1110; 1892,0202; 1893,0902

Several groups of coins were purchased from or presented by Chanda Mall, a Rawalpindi dealer, who is described by Howorth as 'a notorious manufacturer of antiquities and coins. He took in nearly all the great museums, and he also deceived two of the keenest judges I ever knew, the late Sir Wollaston Franks and the late General Cunningham…' (Howorth 1905, 209–10; see also Howorth 1904).

There are examples in the British Museum of his handiwork. In 1874 he sold the Museum a Kujula Kadphises silver tetradrachm, but he also sold a cast of the same coin to Alexander Cunningham, which was later received by the Museum (1894,0506.1889). How fair Howorth's assessment is remains unclear. Nothing is known of Lahmi Dass who is also recorded with Chanda Mall in relation to the 1890,0105 donation.

Government of the Punjab

1879,0501

A hoard of 93 gold coins, mostly of Huvishka, was found near Peshawar, and presented to the Museum.

James Gibbs

1881,0707

A collection of mostly Islamic coins, but including three Kushan coins, one of Wima Takto and two of Huvishka, was presented to the Museum by Gibbs (1825–86), a collector and scholar. He had been a civil servant in India from 1846 to 1879, and served as the Vice-Chancellor of the University of Bombay from 1870 to 1886 (Buckland; Wang).

Charles James Rodgers

1883,1004; 1890,1104; 1893,0204

The first group of coins purchased from Charles James Rodgers (1838–98) was mostly of Islamic coins with one imitation Hermaeus; the second contained four gold coins, of which three are late Kushan. The third group included a Kidarite gold dinar. Rodgers was a linguist, who was sent to Indian in 1863 by the Christian Vernacular Education Society to establish a teacher training college in Amritsar. He was principal of the college for 22 years and was appointed Archaeological Surveyor of the Punjab in 1886. He was one of the most respected numismatists in late 19th-century India (Evans 1899, 26–7). During his time there he frequently published in the *Journal of the Asiatic Society of Bengal* on coins and catalogued the collections at Lahore and Calcutta (Rodgers 1891; 1895; 1896; Buckland; Wang).

Alexander Grant

1885,0403

A large collection of mostly Islamic material was purchased from Grant. It included, amongst a few early Indian coins, a single Kushan coin of Huvishka. Poole, writing to the Trustees to justify the expenditure on the collection, focused on the Islamic material:

> These coins have been selected from a large collection formed by Mr Grant in India. The selection has been made with the object of filling important vacancies in the national Collection, with especial reference to the forthcoming volumes of the Catalogue, particularly that of the Mogul Emperors of Delhi, which the acquisition would greatly enrich in the most interesting part of that series (Coins and Medals Reports 1885, Poole to Trustees, 13 April 1885).

Unfortunately one of the difficulties associated with the practice of recording primarily just the names of people is that sometimes names are very common. Though we know Alexander Grant was a member of the Royal Numismatic Society and of the Royal Asiatic Society (1882–6) and was a Companion of the Order of the Indian Empire, a position usually given to former civil servants and officers, this has only served to differentiate him from some of his more famous namesakes. For example, we know he is not Sir Alexander Grant (Buckland) as the baronet died the year before in Edinburgh and it is clear this individual was still alive and, according to Poole's note, resided at Roseg Villa in Cheltenham. His holding of the Order, indicated by 'CIE', is recorded with his membership of the Royal Numismatic Society in the list of members in the *Numismatic Chronicle* (1884, 5).

Rollin & Feaurdent

1886,0302

A single Wima Kadphises gold coin was acquired from the numismatic dealers Rollin & Feaurdent (see 1835,0901 above). The same piece was illustrated by Prinsep (1835, 631–2, pl. XXXVIII, no. 1) who said it was acquired by a Colonel Smith in Benares (see 1855,0820).

Figure 4.30 Portrait of Bhagwanlal Indraji by Jayakrishna Indraji, 1910, reproduced in *Botany – A Complete and Comprehensive Account of the Flora of Barda Mountain, Bombay*, opposite p. 1. Image: Wikimedia Commons

Figure 4.31 Mathura Lion Capital, 1st century AD, donated to British Museum by Bhagvanlal Indraji, 525mm x 340mm. British Museum, 1889,0314.1

1888,1208 see 1857,0813 (Alexander Cunningham)

Bhagvanlal Indraji **(Figs 4.30–1)**
1889,0105
Indraji was probably one of the most important Indian epigraphers and historians of the late 19th century. He provided editions and translations of numerous inscriptions in Brahmi and Kharoshthi and invaluable assistance to other scholars, generously acknowledged on numerous occasions by scholars such as Rapson, Bühler and Codrington.

He first came to the attention of the academic world in the late 1850s and early 1860s for his work on inscriptions from western India. In 1882 he was appointed a Fellow of the University of Bombay. His publication list is less extensive than might be expected because he received no early schooling in English and was thus dependent on other scholars to translate and publish his work or acknowledge their indebtedness to it (Shastri 1981–4).

In addition to his epigraphic work Bhagvanlal maintained throughout his life an interest in coins, and built a substantial collection, which he saw as an important adjunct to epigraphic work. When he died in 1888 he left the coin collection, numbering about 1800 examples, to the British Museum (Peterson 1888). That included only a modest number, 73, of Kushan examples.

Mrs Rogers (via Rev. Jenkins)
1889,0502
Coins were presented by a Mrs Rogers, through a Reverend Jenkins in Kent (Department of Coins and Medals Reports 1889, Report of Donations 10 May 1889). Mrs Rogers must be the wife of Colonel George W.N. Rogers who commanded the 2nd Battalion of the Royal Irish Regiment during the Hazara expedition of 1888, as the coin was reportedly found during the 'Black Mountain Expedition', a contemporary name for the Hazara expedition into what is now north-eastern Pakistan (Wikipedia).

James Burgess
1889,0506; 1889,0712; 1890,0102; 1890,1106
Mixed lots of coins, also including Kumaragupta silver and tribal states, were purchased (£7/3s/6d, £2, £3, £10) from Burgess (1832–1916). James Burgess was a noted art and architectural historian of India. He worked as Archaeological Surveyor of Western India from 1874 to 1881 and later as Surveyor of Southern India and Director General (Buckland; Wang).

Indian Museum, Calcutta
1889,1203
A group of 192 coins were transferred from the Indian Museum, Calcutta, representing a mixed group of Indian material, of which two coins were Kushan.

1890,0102 see 1889,0506 (James Burgess)
1890,0105 see 1874,0709 (Chanda Mall)
1890,0404 see 1857,0813 (Alexander Cunningham)
1890,0502 see 1874,0709 (Chanda Mall)

Jose Gerson da Cunha
1890,0604
Four Kushan gold coins were acquired as part of a large collection of 199 coins from the auctioneers Rollin & Feaurdent, sold as 'Da Cunha'. Gerson da Cunha was a medical doctor based in Bombay. He joined the Royal Asiatic Society in 1873 and published books on medicine, linguistics and history, including a book on Portuguese coins issued in its Indian colonies (Gerson da Cunha 1883).

1890,1104 see 1883,1004 (Charles James Rodgers)
1890,1106 see 1889,0506 (James Burgess)
1890,1110 see 1874,0709 (Chanda Mall)
1892,0202 see 1874,0709 (Chanda Mall)

Richard Carnac Temple **(Fig. 4.32)**
1892,1008; 1923,0121
Major Temple (as he is referred to in the registers; 1830–1931) presented coins (217 and 105) to the Museum, a mixture of north-western Indian and Burmese in the first case and Greek, Roman and British in the second. In return for the first donation R.S. Poole presented Temple with six of the Department's publications on Oriental coins. Temple joined the British Army in 1871 and transferred to the Indian Army in 1877. He served in the Afghan campaigns of 1878 to 1879

Figure 4.32 Photograph of Richard Carnac Temple by Walter Stoneman, 1925. National Portrait Gallery, NPG x162506

and the Burmese War of 1887–9, after which he became the Chief Commissioner of the Andaman and Nicobar Islands in 1894 and authored books on popular tales and legends, as well as publishing the *Indian Antiquary* journal, in which he wrote several articles on Burmese currency and coins (Buckland; Wang; Dudley 1997).

1893,0204 see 1883,1004 (Charles James Rodgers)

George Arthur Howard Lillie
1893,0407
Arthur Lillie (1831–1911) sold the Museum 12 coins (£27) including four of late Kushan gold. He was a soldier in the Indian Army 1847–63, who became a Buddhist and wrote a number of books intended to show that Christianity derived from Buddhism in most of its central tenets (Wang).

1893,0506 see 1857,0813 (Alexander Cunningham)
1893,0902 see 1874,0709 (Chanda Mall)
1894,0506 see 1857,0813 (Alexander Cunningham)
1894,0507 see 1857,0813 (Alexander Cunningham)

Asiatic Society of Bengal
1895,0704
A transfer of coins from the Asiatic Society of Bengal included at least 32 Puri-Kushan types, two Kanishka, and some Kidarite/Late Kushan. Sixty-eight Islamic and one punch-marked coin were also transferred. The person responsible for this was August Friedrich Rudolf Hoernlé (1841–1918), Honorary Secretary of the Society (see also 1902,0608). He went to India as part of the Church Missionary Society and was particularly noted for his linguistic and epigraphic work. There is no note to this effect but it is likely that the Puri-Kushan coins are a hoard.

Anonymous
1898,0712
The single coin with this number was included in the catalogue of British Museum coins (Gardner 1886) as number 21. The original ticket was damaged and the attempted reading resulted in this number, the year of acquisition clearly incorrect, an exceptionally rare recording error. It remains unclear what the original number was.

Benlian Brothers
1898,1003
Not all coins are acquired deliberately. In 1898 the Greek curator purchased a collection of 457 Parthian coins for £10 from the Benlian Brothers, importers of Oriental Carpets in Bishopsgate, London. The justification for doing so was the potential research interest of the collection:

> These coins have been most carefully selected by their former owners from the very numerous varieties of the Parthian small currency which are still to be obtained in Persian though they have hitherto been neglected by collectors.
>
> In view of the extreme difficulty of arranging in historical sequence the coins of the Parthian monarchs, Mr Head, thinks it advisable to acquire as many good examples as possible of these curious little coins in the belief that they will greatly facilitate a scientific classification of the larger coins (Department of Coins and Medals Reports Jan 1897–Aug 1899, 344, 'Purchases 1 October 1898').

Amongst them was a single example of a Wima Takto quarter unit which, it seems likely, had passed into Iran in antiquity, and was mistaken for a Parthian coin.

Donald Christian Strachan Lindsay Carnegie
1898,1102
A single Samatata gold coin imitating the dinars of Kanishka I was donated to the Museum by the coin collector Major Lindsay Carnegie. Carnegie, the son of a Scots laird, was an officer in the Indian Army, serving in the Bengal Cavalry *c.* 1865–77. The rest of his extensive coin collection is now housed in the National Museums of Scotland (Holmes 2004).

The twentieth century

By the close of the 19th century the Museum had acquired more than a thousand Kushan coins and the bulk of its present collection of gold examples. The largest groups were purchased from Alexander Cunningham and received from the East India Company (either directly or through the India Office Collection).

The early 20th century continued a similar pattern, with donations or purchases from Europeans resident in India, though now usually scholars involved with government activity, rather than former military officers. The acquisition would be interrupted twice by the two world wars (1914–18 and 1939–45), apart from a single coin donated by the Keeper of Coins and Medals in 1917 (see below, 1917,1103). The second interruption and India's Independence had a profound effect on collecting practice.

Exporting antiquities was not regulated until the introduction of the Indian Treasure Trove Act in 1878 and James Burgess (see above, 1889,0506) had to press the government to forbid individuals from disposing of material acquired during their official duties in 1878. However, there was still no licensing regime in place for export. With British rule this meant Europeans had easy access to Indian coins. Not only did Britain lose its privileged access in 1947 but in the same year India's *Antiquities Export Control Act* and Pakistan's *Export Control Act* came in to force requiring a

licence to be issued for the export of antiquities. Further legislation followed in both countries to limit the trade in antiquities (Chakrabarti 2003, 165–87).

This and the reduced resources of the Museum explain the notable slowing of acquisitions from 1940. When the Museum did begin to acquire significant numbers of coins again in the 1980s the character and source of the acquisitions had changed dramatically.

Secretary of State for India
1902,0608
A collection of 465 coins was presented to the Museum by the Secretary of State for India, George Hamilton, containing 12 Kushan examples. The coins are those collected by Rudolf Hoernlé between 1894 and 1898 from various sources in Central Asia, particularly from Khotan (Hoernlé 1899; Sims-Williams, U. 2012[2004]).

W.J. Templar
1902,1202
A mixed group of 40 northern Indian coins, containing one Kushan imitation, were purchased from a Captain W.J. Templar, about whom nothing is known.

Walter Stanley Talbot
1903,1106
Part of a mixed group of 49 pre-Islamic coins, including two Kushan, from north-western India was presented by Talbot (1869–1935), a collector of Indian coins (Wang).

Frederick Parkes Weber **(Fig. 4.33)**
1906,0921
Three Kushano-Sasanian coppers were included in the massive collection of copper coins presented to the Museum by coin collector Parkes Weber (1863–1962). He was a medical doctor working in London. The collection had been built by Parkes Weber and his father Sir Hermann David Weber (1823–1918), Queen Victoria's personal physician. Other parts of their collection were donated to the Fitzwilliam and Ashmolean museums.

John Biddulph
1907,0702
Thirty coins, including two Kushan, were presented by Colonel Biddulph (1840–1921), an enthusiastic and renowned ornithologist who also collected coins. He joined the Indian Army in 1857 and later became a civil servant. He was part of Sir Douglas Forsyth's expedition to Kashgar in Chinese Central Asia in 1873–4 (Waller 1990, 144–68). From 1877 to 1881 he served in Gilgit (now in northern Pakistan). He retired in 1895. His ornithological collection was bequeathed to the Natural History Museum, London (obituary in *Ibis* 1922).

E.G. Coutts (via G. Lubbock)
1907,1207
Six coins were presented by E.G. Coutts via a Captain Lubbock, of which one was Kushan. Both Mr Coutts and Captain G. Lubbock, Royal Engineers, worked on the North-Western Railway, along the Kabul river (northern Pakistan) (*Indian Engineering* 1904, 171, 291; Dane 1908, 9).

Figure 4.33 Portrait medal of Frederick Parkes Weber, 1899, by Frank Bowcher, 199mm x 136mm. British Museum, M1954,0202.1

Sir Henry McMahon
1912,0206
185 coins were presented by Vincent Arthur Henry McMahon (1862–1949), an Indian Army officer and diplomat. He played an important role in establishing the boundaries of British India. The coins are said in the registers to come from the Swat valley. They include one *sya*-type Shaka from the second phase of the main mint (L.G1-ii). McMahon was the British political agent in Swat (Rapson 1901). He also collected coins in Seistan (Codrington 1911).

Richard Manifold Craig
1913,0401
Nineteen coins of north-western India were presented by Lieutenant-Colonel R.M. Craig (1847–1913), including two coins of Kujula Kadphises. He seems to have been a medical officer serving with the Indian Army, as a surgeon with this name is recorded as serving in Burma 1866–8, and retired in 1892 (*The British Medical Journal* (India), 16 January 1892). The coins were donated a month before his death.

Sir George Francis Hill **(Fig. 4.34)**
1917,1103
A single Kushano-Sasanian copper was included in a group of miscellaneous coins, mostly Persian, donated by Sir George Francis Hill (1867–1948) when he was Keeper of Coins and Medals. He joined the British Museum in 1893, serving as a curator in the Department 1893–1911, and as its Keeper 1911–31. He was then appointed as the Museum's Director in 1931 and retired in 1936. He was an expert in Greek coins and Renaissance medals.

H.E. Dean
1919,0612
Two coins were presented by Colonel Dean, including one Wima Kadphises coin. Dean was a doctor who had served in India and in 1919 was serving at the War Hospital in Croydon known as Addington Park. He also donated a Gandharan sculpture to the Museum in 1939.

Sir Raleigh Gilbert Egerton
1919,0702
Major General Egerton (1860–1931), son of William Egerton

Figure 4.34 Portrait of Sir George Francis Hill, *c.* 1935, etching by Roderic Hill, 198mm x 148mm. British Museum, 1935,0521.1

(Lieutenant Governor of the Punjab), presented a Eucratides and a Soter Megas coin to the Museum. Egerton served in the Indian Army.

Edmond Hilary Salt James
1920,0421
Thirteen coins, including one Kushan, from north-western India were purchased from Major James, who joined the Indian Army in 1884 and served in the Punjab and Kashmir (India Office List 1916, 36; 1918, 571).

Malcolm George Clark (via Mrs Marietta Stuart Jacomb)
1920,0515
254 coins, including one Kushan, were purchased from Mrs M.S. Jacomb from the collection of her father Major-General Malcolm George Clerk, Bengal Infantry, serving as an engineer in the Rawalpindi survey division, deceased 1906, obituary in *Numismatic Chronicle* 1907, *Proceedings* pp. 33–4.

William Hoey (via Spink & Son Ltd)
1920,1016
A group of 56 coins were purchased from Spink & Son Ltd, a London-based numismatic dealers. The 47 Indian coins (mostly gold and silver) included one coin of Meśra alongside some Gupta coins, presumably acquired together. The coins had been procured from Dr Hoey, a retired Indian civil servant, formerly District Commissioner in Gorakhpur (Uttar Pradesh) (Smith 1900, 432), and an amateur numismatist and historian. The Indian historian Vincent Smith (1902, 267) wrote of him: 'In as much as Dr Hoey's ingenious arguments move on a plane different from that of mine, and seem to me wholly opposed to the evidence, I trust that I may be excused from criticizing them in detail.'

Milo G. Talbot
1921,0306
A group of 12 Greek coins, including one late Kushan coin, were received in an exchange of items with Colonel Talbot. There is no information on what was exchanged for the items. Talbot had served in the Second Afghan War (1879–80), been part of the Russo-Afghan boundary commission in 1885 and published an article on the statues at Bamiyan. He went on to work in the Sudan and later with the Egyptian Army. His contributions as surveyor were sufficient for him to be awarded the patron's medal of the Royal Geographic Society 'For the large amount of excellent survey work done by him on the Afghan frontier and in the Sudan' (Talbot *et al.* 1924; obituary in *Geographical Journal* 1932).

W.P. Parry
1922,0116
Fifty coins were sold to the Museum by W.P. Parry, all from north-western India, consisting of Indo-Greek to Kushan coins, including 13 Kushan. Parry is otherwise unknown.

James Parke Rawlins
1922,0213; 1922,0423
Rawlins served in the Punjab Police in the late 19th century (Smith 1907). He sold the Museum a group of 155 Indian coins for £10, and a mixed bag of 155 north-western Indian coins. The second group consisted of 30 coins of the same type. George Hill, then Keeper of the Department, recommended the acquisition as follows:

> …collected in the Punjab, mainly early local issues of Hindu States and of the Hun invaders of India in the sixth cent. A.D. (all rare and belonging to series which have been little collected)… (Department of Coins and Medals Reports 1921–22, Report respecting offers for purchase, 1 Feb 1922).

Richard Bertram Whitehead **(Fig. 4.35)**
1922,0424; 1933,0712
Whitehead (1879–1967) was a major scholar of Indian numismatics. He was the first honorary Secretary and Treasurer of the Numismatic Society of India and his work included a catalogue of the Lahore Museum (Whitehead 1914). In 1922 the bulk of his collection was sold to the British Museum. His collection consisted of over 4000 coins and was bought by the Museum for £3500.

He retained some coins and continued to acquire others while in the United Kingdom. In 1933 the sale consisted of just three gold coins, including the otherwise unknown elephant-rider coin of Wima Kadphises (Wang). His archive is preserved in the Department of Coins, Fitzwilliam Museum (http://www.fitzmuseum.cam.ac.uk/dept/coins/library/whitehead/).

1923,0121 see 1892,1008 (Richard Carnac Temple)

Henry Nelson Wright
1924,1017
This group of six Indo-Greek and Indo-Scythian coins with one Kujula Kadphises 'Heraus'-type coin was sold to the Museum for 200 rupees. The coins were purchased from Wright, a collector and scholar who had worked with the Indian Civil Service. He was one of the founding members of the Numismatic Society of India. His particular interest was Islamic coins, and it was in that context that he published two volumes of the catalogue of the Indian Museum in Calcutta (1907) for which he was awarded the Royal Numismatic Society Medal in 1932. His Gupta coins were acquired by the British Museum in 1912 and his Indian Islamic coins in 1939 before his death in 1941 (Sydenham 1941, 11–12) (Wang).

R.A. Lyall
1925,1109
Nine coins were presented by Lieutenant-Colonel R.A. Lyall, including a gold Kanishka dinar. Lyall had served in the Indian Army in Kashmir before buying a farm in South Africa, which has now become the famous Nederburg vineyard.

M.F.C. Martin
1927,1211
A donation of three imitation Kushan coins was made by Martin. Captain Martin served in the Royal Engineers in India, based in Peshawar. He was the author of an article on the coins of the Kidarites and late Kushans (1937), based on his acquisition of Kidarite Hun silver coins in Peshawar and Akra. He donated large quantities of archaeological material from Baluchistan to the British Museum in 1946.

Maharaja Purna Chandra Bhanja Deo
1928,0108
A gift came to the Museum from Maharaja Purna Chandra Bhanja Deo, ruler of the Princely State of Mayurbhanj, who died in 1928. Mayurbhanj (located in Odisha) was a minor Princely State, entitled to the smallest nine-gun salute. The register records only a dozen coins but at least 21 are identifiable in the trays by their tickets.

The coins are mostly Puri-Kushan types and appear to be part of a hoard, consisting of Kanishka, Huvishka and Puri-Kushan examples found during excavations at Viratgarh near Bhanjakia near Khiching in 1923 (Tripathy 1986, 42). The hoard was divided and sent to museums in India as well as to the British Museum.

Henry Van den Bergh (via National Art Collections Fund)
1929,0725
Sixteen gold coins, including a rare Greek inscription coin of Kanishka I, were presented by Van den Bergh to the Museum via the National Art Collections Fund. This 1929 gift was important enough for John Allan (1929) to note it at the time and included a selection of rare or unusual gold coins. Van den Bergh had acquired the coins from the collection of Mr G.B. Bleazby, who worked for the Financial Department of the Government of India in north-western India (Whitehead 1914, iv). These were apparently collected by Bleazby on the occasion of the Delhi Durbar in 1911.

Walter Stanley Talbot
1933,0315
Four coins: two Hun silver, a copper Kashmir piece, and a Kushano-Sasanian copper were acquired from Talbot, formerly an Indian civil servant in the Punjab, who had previously given the Museum large collections of coins and seals in 1903 (Porter 2011, 21).

Gerald H.W. O'Sullivan
1933,0703
Eight coins were presented by Lieutenant-Colonel O'Sullivan, who served in the Indian Army during the Second Afghan War and also with the Chitral Relief Force in 1895. The coins were found in Chitral in 1896.

Figure 4.35 Portrait of Richard Bertram Whitehead, *c.* 1940, by unknown photographer. British Museum Money and Medals Department archive

Edith Emily Heron-Allen
1933,0705
Thirteen coins, mostly Roman, but including two Kushan, were presented to the Museum by Mrs Heron-Allen, the wife of Edward Heron-Allen (1861–1943), a writer and dabbler in a variety of fields, including geology and palmistry. He is also known as a translator of Persian poetry and author of short stories under the pseudonym Christopher Blayre (Gregory 1943).

A.S. Last
1933,1003
A single coin was presented by Last about whom no additional information is available.

Laurie Asher Lawrence
1937,0709
Two coins were presented by Lawrence (1857–1949). This was amongst many donations Lawrence made over the years to the Department. He was a very keen coin collector. He worked as a surgeon in London and had served as an officer of both the Royal and British Numismatic Societies, including as editor of the *British Numismatic Journal* (Manville).

W.A. Gilmour
1937,1001
Gilmour donated a Kushano-Sasanian copper coin, but is otherwise unknown.

William Robert Gourlay
1938,0507
Gourlay C.S.I., C.I.E. (1874–1938), was a civil servant in India, Director of Agriculture in Bihar, then Secretary to the Governor of Bengal 1912–22, and a correspondent and friend of the Bengali poet Rabindranath Tagore (Dutta and Robinson 1997, 190–5). He was a Fellow of the Royal Asiatic Society and a Trustee of the Indian Museum, Calcutta. After his retirement he lived at Kenbank, Dalry, Castle Douglas, Scotland, and was editor of the *Dumfriesshire and*

Galloway Natural History and Antiquarian Society Transactions. He presented several ancient coins to the Museum including one Kushano-Sasanian copper.

Evelyn Hay Cobb
1939,0516; 1956,0205
Two coins were received from a Major (later Lieutenant-Colonel) Cobb in 1939, one of them a modern forgery of a Wima Kadphises issue. In 1956 he presented a single Vasudeva I gold quarter. He had served in the Indian Army and as a political administrator in north-western India, and wrote articles on the fauna of the Himalayan regions.

Sir Henry Stephen
1944,1102
A single late Kushan dinar was donated by Sir Henry Stephen, a judge in the Calcutta High Court.

E.E. Olroyd
1946,1004
The large bequest of Olroyd, a collector living in Kent, was primarily English material, but also included two Kushan coins among a handful of Oriental coins.

J.H. Pulaski
1949,0101
A single Kanishka coin was presented by Pulaski about whom no additional information is available.

Robert Friedberg
1954,0211
Nine coins, including one Kushan example was presented by Friedberg (1912–63), a noted collector and the original author in 1958 of *Gold Coins of the World – A Guide to Types and Prices for Collectors*.

Anonymous (via A.H. Baldwin & Sons Ltd)
1954,1014
An anonymous donation of 41 coins, including one Kushan coin, was made through the London-based coin dealer A.H. Baldwin & Sons Ltd (Department of Coins and Medals Reports 1954, 51–9, Report of Donations 2 Nov 1954). (For Baldwin & Sons, see also 1989,0625.)

1956,0205 see 1939,0516 (Evelyn Hay Cobb)

W.J. Stockden
1956,0303
A Kanishka copper was presented by Stockden about whom no information is available.

H.F. Campbell
1956,0406
A late Kushan gold coin was presented by Campbell about whom no information is available.

T.W. Armitage
1956,0409
The bequest of Armitage (1878–1956) included a small number of Kushan coins. He was an avid collector whose main interest was in medieval English coins. Though his collection came to the British Museum, his papers went to the University of Nottingham (Manville).

Henry Lawrence Haughton
1956,0710
Fifty-one coins were received as a bequest from Major General Haughton (1883–1955) consisting mostly of Alexander the Great and his successors, including a single Kushan coin. Haughton joined the Indian Army in 1902, and apart from time in England in the 1920s he continued to serve in India until his retirement in 1940.

John R. Cooper
1957,0309
A single coin was donated by Cooper, who is otherwise unknown.

Miss A. Woodfield
1959,1001
Late Kushan coins were presented by Miss Woodfield, who is otherwise unknown.

Sir Allen George Clark
1964,1203
Sixty-eight coins were received as part of the bequest of Sir Allen George Clark, an American businessman based in England, who was a coin collector (Carson 1966).

Anonymous
1976,1015
An anonymous donation was made of a single coin of Wima Kadphises.

Department of Oriental Antiquities transfer
1979,0215
This number represents coins which had been held in the Department of Oriental Antiquities (today the Department of Asia). They were transferred from there to Coins and Medals in 1976. Two had been received from Cunningham in 1887. Others came from Major H.O. Collyer, who had collected them from Akra in Bannu District (Cribb 2002), and about 20 were part of the collection of Charles Masson (see IOC and IOLC below). Of the transferred coins more than 25 were Kushan, though establishing individual provenances today is difficult.

G. Chater
1979,0220
A donation of two gold coins (one Vasudeva, one Chandragupta II) was made by Chater, about whom nothing more is known.

Anonymous
1980,0321
An anonymous donation was made of one late Kushan gold coin.

Hoards, dealers and collectors

Until the late 1970s the British Museum collection of Kushan coins had been largely dominated by gold coins, particularly

the issues of Huvishka with their diverse range of divinities.

From 1980 onwards the curatorial staff sought to acquire copper coins in order to develop a representative sample of issues and to correct the substantial imbalance that existed. In many cases the coins acquired originated as hoards, though the materials are technically parcels (a group of connected coins which might represent just part of the hoard). Efforts were made to acquire as much as possible and to record information about the origin of the hoard, starting with a group purchased from a B.M. Fida in 1980. The objective was to create a reference collection sufficiently large that it might be possible to establish an order of issue, especially for the 3rd-century coins.

B.M. Fida
1980,0610
A parcel of 28 coins was purchased by the Museum for £56, from Fida about whom nothing more is known. The group was subsequently published (Cribb 1981a, hoard 299).

K. Skin
1980,1004; 1981,0322
The first group were donated by Mrs Skin and consisted of 146 coins said to be a hoard found at Hund on the Indus. They were subsequently published (Cribb 1980, hoard 304). The second group contain 44 coins in total, of which 25 were Kushan issues. All these coins represented her father's collection which had been assembled in Peshawar before 1947.

Alan J. Humphries
1980,1005
A selection of 122 coins from a larger published parcel of 564 Kushano-Sasanian coins (Cribb 1980, hoard 303) was acquired from Humphries, a coin collector, who also worked for Kirkgate Stamp Company (see below, 1981,0120). He became a member of the Royal Numismatic Society in the same year.

G. Watson
1980,1006
A group of 14 Kushano-Sasanian coins were purchased from Watson, a collector, about whom nothing more is known, for £45. The group were part of a parcel of 69 coins purchased in Karachi and subsequently published (Cribb 1980, hoard 301).

Douglas C. Corbell
1980,1113
One late Kushan copper was donated by Corbell, a coin collector.

Kirkgate Stamp Company
1981,0120
Twenty-five coins were purchased from Kirkgate Stamp Company in Leeds for £25, consisting of Kushano-Sasanian, Kushan and post-Kushan copper coins. It is perhaps a further group from the hoard from which Alan Humphries' coins came (see above, 1980,1005).

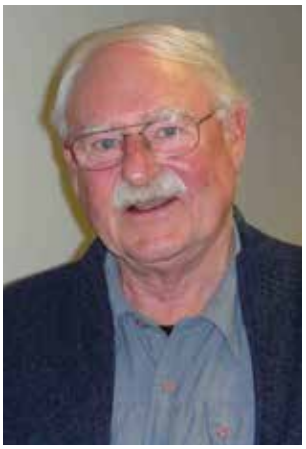


Figure 4.36 Portrait of Michael Mitchiner 2012. Photograph by Joe Cribb

1981,0322 see 1980,1004 (K. Skin)

Robert C. Senior
1981,0324; 1982,1108; 1983,0119; 1983,0528; 1983,0729; 1983,1014; 1985,0306; 1987,0108; 1988,0322; 1988,1111; 1989,0104; 1990,0520; 1990,0820; 1990,0921; 1991,0101; 1991,0416; 1991,0604; 1992,0232; 1992,0605; 1994,0710; 1995,0506
Bob Senior, a coin collector and dealer, sold or donated more than 600 coins between 1981 and 1995. His own scholarly contribution has focused on the Indo-Scythian and Indo-Parthian coins which preceded the Kushan dynasty (Senior 2001 and 2006). His large collection of Indo-Scythian, Indo-Parthian and early Kushan coins was acquired by the Ashmolean Museum in 1998.

Acquisitions 1988,0322 and 1988,1111 were both part of a hoard of Huvishka coins. This group is particularly important as it contains a large number of die links and has helped to establish the sequence of issues at Huvishka's copper mints.

Robert Tye
1981,0325; 1981,0735; 1981,0736; 1982,1117; 1983,0120; 1983,0531; 1985,0427; 1990,0513; 1990,0518; 1992,0119; 1992,0231; 1995,0510; 1998,0305; 1998,0309 ; 1998,1202; 2001,1005 ; 2002,1020
Between 1981 and 2001 the Museum received approximately 750 Kushan coins as purchases or gifts from Robert Tye. Tye, a collector and coin dealer, has written on ancient and medieval South Asian coinage, with a particular interest in the subject of metrology (Tye and Tye 1995; Tye 2009). On occasion some information was available concerning the coins' original find spots. For 1981,0325 the imitation Kushan coins (17–25) were found near Delhi, the Kota (26–30) from Gwalior, and the Kushano-Sasanian imitations (31–39) from a hoard discovered near Rawalpindi. The single coin of 1995,0510, a worn copper issue of the period of Vasishka, was said to have been found with Kota coins.

Michael Mitchiner **(Fig. 4.36)**
1981,0327
A single Kushan coin was donated by Mitchiner, one of the most prolific scholars of Indian numismatics (Mitchiner 1975–6; 1978).

1981,0735 see 1981,0325 (Robert Tye)
1981,0736 see 1981,0325 (Robert Tye)

Anonymous
1981,1213
A late Kushan coin was purchased from an anonymous vendor.

Richard Williams
1982,0226; 1982,0626
Two groups of Kushan-Sasanian and Kidarite Hun gold and copper coins were bought from Williams, a coin collector.

Spink & Son Ltd
1982,0625; 1982,1107; 1983,0529; 1986,0812; 1994,0711; 1996,0303
Between 1982 and 1996 the Museum purchased a small number of coins from the London-based numismatic dealers Spink & Son (see also 1920,1016).

1982,0626 see 1982,0226 (Richard Williams)
1982,1107 see 1982,0625 (Spink)
1982,1108 see 1981,0324 (Robert C. Senior)

Anonymous
1982,1109
An anonymous donation was received.

M. Pitt
1982,1115
A group of Indo-Parthian coins was purchased from Pitt which also included one example of Kujula Kadphises (Cribb 1985e, hoard 440).

1982,1117 see 1981,0325 (Robert Tye)
1983,0119 see 1981,0324 (Robert C. Senior)
1983,0120 see 1981,0325 (Robert Tye)

Craig A. Burns
1983,0525
Burns was a collector of Kushan and Kushano-Sasanian coins based in California (Jongeward 2020, 1–20, 67–78). His collection was donated to the Bern Museum, Switzerland in 1988 and then published by Robert Göbl (1993a). He donated two coins to the British Museum, one of which was a Hephthalite Hun dinar in the Kidarite style.

1983,0528 see 1981,0324 (Robert C. Senior)
1983,0529 see 1982,0625 (Spink)
1983,0531 see 1981,0325 (Robert Tye)
1983,0729 see 1981,0324 (Robert C. Senior)
1983,1014 see 1981,0324 (Robert C. Senior)

Simmons & Simmons
1984,0110; 1987,0109; 1988,0808; 1989,0627; 1992,0229; 1995,0935; 2000,0406; 2000,0408
Between 1984 and 2000 the Department received about 30 Kushan coins amongst other material from the London-based dealership Simmons & Simmons.

R.D. Shah
1984,1214
A group of 45 coins, apparently a hoard parcel, containing both Kota and Kushan examples were purchased together from Shah.

1985,0306 see 1981,0324 (Robert C. Senior)

Barbara Stoller Miller
1985,0426
The Museum received this donation from Miller (1940–93), who was a highly respected scholar and translated a number of important Sanskrit works (Wikipedia).

1985,0427 see 1981,0325 (Robert Tye)

B. Becker
1986,0641
Dr Becker, a German collector, sold a Kushano-Sasanian gold coin to the Museum.

1986,0812 see 1982,0625 (Spink)
1987,0108 see 1981,0324 (Robert C. Senior)
1987,0109 see 1984,0110 (Simmons & Simmons)

Richard Boys Lewis
1987,0649
A single Kushan coin was received as part of the Lewis bequest of Greek coins. Lewis was a British coin collector.

Steve Album
1987,0921
A group of 23 coins was donated by the American collector and dealer Album and identified at the time of donation as a hoard parcel.

1988,0322 see 1981,0324 (Robert C. Senior)

Keith Sugden
1988,0324
A Kushan coin was donated by Sugden, who was Keeper of coins at Manchester Museum.

1988,0808 see 1984,0110 (Simmons & Simmons)
1989,0627 see 1984,0110 (Simmons & Simmons)

A.H. Baldwin & Sons Ltd
1989,0625
A Kidarite Hun gold coin was bought from Baldwin, the London coin dealer. (See also 1954,1014.)

Carlo Valdettaro
1989,0904
Valdettaro, born in Milan, worked in Calcutta and Kathmandu. He made frequent trips to Nepal as the Managing Director of the Indian section of an Italian electronics company and was one of the first Europeans to collect Nepalese coins. He died in Lugano in Switzerland on 29 April 1988 shortly before the publication with Nicholas

Rhodes of what remains the standard catalogue for Nepalese coins (Rhodes *et al.* 1989).

At his death he bequeathed 4,590 coins to the Museum, and his library of 314 volumes (with some other materials donated to the Italian Institute for the Middle and Far East (IsMEO), Rome). The donation was handled by his wife and by his good friend Nicholas Rhodes. In addition to his collection the Department of Coins and Medals holds Valdettaro's own correspondence and that section of Nicholas Rhodes' correspondence which concerned Valdettaro (the rest being held by the Ashmolean Museum in Oxford).

The collection included 37 Kushan coins. The most interesting of these are eight copper coins: one of Kujula Kadphises, two of Kanishka, three of Huvishka, an imitation of Kanishka, and a single coin of Vasishka (1989,0904.680–7). This group were all collected in Nepal. They supplement the meagre archaeological finds (Verardi 1992) and suggest the same basic conclusion, that Kushan coins, often in worn condition, circulated in Nepal, and that they arrived there from the Gangetic valley a long time after their initial issue.

1988,1111 see 1981,0324 (Robert C. Senior)
1989,0104 see 1981,0324 (Robert C. Senior)
1990,0513 see 1981,0325 (Robert Tye)
1990,0518 see 1981,0325 (Robert Tye)
1990,0520 see 1981,0324 (Robert C. Senior)
1990,0820 see 1981,0324 (Robert C. Senior)
1990,0921 see 1981,0324 (Robert C. Senior)
1991,0101 see 1981,0324 (Robert C. Senior)
1991,0416 see 1981,0324 (Robert C. Senior)
1991,0604 see 1981,0324 (Robert C. Senior)
1992,0119 see 1981,0325 (Robert Tye)

Riaz Babar
1992,0207; 1993,0506; 1993,0642; 1994,0707; 1995,1016
Various coins were donated by Babar, a Pakistani collector.

1992,0229 see 1984,0110 (Simmons & Simmons)
1992,0231see 1981,0325 (Robert Tye)
1992,0232 see 1981,0324 (Robert C. Senior)
1992,0605 see 1981,0324 (Robert C. Senior)
1993,0506 see 1992,0207 (Riaz Babar)
1993,0642 see 1992,0207 (Riaz Babar)
1993,0707 see 1992,0207 (Riaz Babar)
1994,0710 see 1981,0324 (Robert C. Senior)
1994,0711see 1982,0625 (Spink)

C. Karp
1994,0911
Karp, an American collector donated several Kushano-Sasanian copper coins to the Museum.

1995,0506 see 1981,0324 (Robert C. Senior)

Neil Kreitman Foundation
1995,0507
The Neil Kreitman Foundation purchased a group of Sasanian and Kushano-Sasanian coins, apparently a hoard, from R.C. Senior and donated them to the Museum.

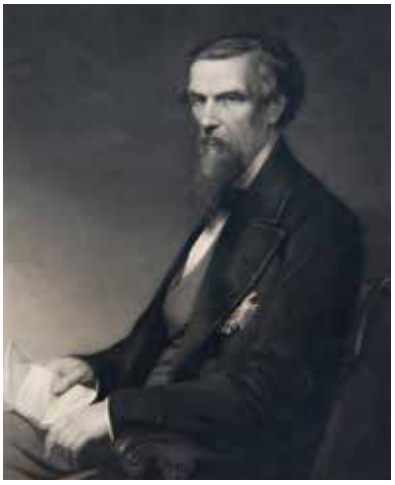


Fig. 4.37 Portrait of Sir Henry Montgomery Lawrence, mezzotint after oil portrait by John Robert Dickie, published by Henry Graves & Co., 1866, 435mm x 332 mm. British Museum, 1943,0410.1388

1995,0510 see 1981,0325 (Robert Tye)
1995,0935 see 1984,0110 (Simmons & Simmons)
1995,1016 see 1992,0207 (Riaz Babar)
1996,0303 see 1982,0625 (Spink)

Sir Henry Montgomery Lawrence (via John Lawrence) **(Fig. 4.37)**
1996,1030
These coins were donated by John Lawrence. They were originally collected by his ancestor Brigadier General Henry Lawrence, who served as a captain in the First Afghan War and was later killed during the Indian Mutiny at Lucknow in 1857 (Wikipedia).

1998,0305 see 1981,0325 (Robert Tye)

Anonymous
1998,0307
An anonymous gift to the Department.

1998,0309 see 1981,0325 (Robert Tye)
1998,1202 see 1981,0325 (Robert Tye)

Mark Townsend
2000,0111
A single Kushan coin was donated by Townsend, who is otherwise unknown.

2000,0406 see 1984,0110 (Simmons & Simmons)
2000,0408 see 1984,0110 (Simmons & Simmons)

Robert Göbl
2000,0508
A Hephthalite gold coin from the collection of Robert Göbl was purchased at auction from Busso-Peus German auction house (Göbl 1967, type 85, no. 5).

Christopher Beever
2000,0509
A single coin was purchased from Beever, a British coin collector.

2001,1005 see 1981,0325 (Robert Tye)

Paul Thackray
2001,1201
A large collection of coins was received by the Museum from Thackray, mostly Mamluk coins from Egypt and Syria. He was the founder of Thackray Medical Museum in Leeds, which opened in 1997.

2002,1020 see 1981,0325 (Robert Tye)

Wang Wei
2002,1033
Two coins were donated by Wang Wei, a Chinese collector.

Anonymous
2003,0717
An anonymous gift was given to the Museum.

Nicholas Rhodes
2009,4046
A coin of Kujula Kadphises was donated by Rhodes, a private collector, General Secretary of the Oriental Numismatic Society, and noted scholar of Nepalese coins (see also 1989,0904). It was originally acquired in June 1964 at Taxila.

Collections and coins, registered by codes, rather than dates

India Office; IOC; IOLC
When the East India Company was disbanded in 1858, the India Office (1858–1947) was created as the British Government department in London handling affairs relating to the governance of India. The Company's Museum came under the India Office's jurisdiction and after East India House was sold and eventually demolished, the collections were moved with the India Office to Whitehall (Desmond 1982; Willis 1997). In 1882 about two and half thousand coins were split between the Indian Museum in Calcutta and the British Museum. The latter was designated the Indian Office Collection in the British Museum (IOC).

The vast majority of these coins were those excavated or purchased by Charles Masson (Errington 1999; 2003; 2017a; 2017b; 2021a) in Afghanistan particularly in the vicinity of Begram. They were not the only coins excavated by Masson which reached the British Museum: a small number had been picked out and were amongst the earlier donations by the East India Company (see above, 1838,EIC).

Another substantial group of coins from the Indian Museum, mostly from Masson, were stored in the India Office Library of the British Museum. This became part of the British Library when that institution was separated from the British Museum in 1973. Subsequently the collection was loaned to the British Museum in 1995 and is identified by the code IOLC (India Office Loan Collection).

The approximately 10,000 coins in this collection have been discussed extensively by Elizabeth Errington (2021a) and are published independently of this volume. The main interest of these groups is that alongside Taxila they are one of the few substantial site assemblages available for early Kushan coins.

OR
OR numbers refer to a supplementary register kept by the Department of Coins and Medals for items which cannot be assigned a regular Museum number. In some cases, coins were acquired without properly recording them, which may be as simple as failing to give individual numbers. This is the case for many coins acquired from James Prinsep, where it is recorded that the coins were acquired from Prinsep but no acquisition number was assigned at the time. In other cases, a coin has become separated from the ticket on which its number was recorded. This may be deliberate, as early tickets were often replaced with catalogue tickets once coins were published, or by simple accident, or as a result of disturbance such as the movement of coins during the Second World War.

Though the proportion of supplemental numbers is small, in absolute terms there are more than 9000 in the 'Oriental' coin collection as a whole. Amongst the Kushan coins about 450 have this supplementary registration number. These OR numbers are a likely explanation for many of the discrepancies that exist between the early registers and the actual number of coins from early acquisitions locatable in the collection today.

AK, IA and S
These prefixes stand for Ancient Khotan, Innermost Asia, and Serindia, indicating the volumes in which they were published by Sir Marc Aurel Stein (1907; 1928; 1921). Stein carried out three expeditions to Central Asia during which he collected significant numbers of coins most of which are preserved in the Department of Coins and Medals as documented by Helen Wang (Wang 2004, 19–23; Wang and Perkins 2008). A small number are Kushan coins, mostly Kashmir drachms of Kanishka I, and were acquired by Stein near Yotkan (in the Khotan district). He also acquired a significant number of Sino-Kharoshthi coins which have been published by Cribb (1984b; 1985d). All of the coins have been published in their context by Wang (2004, 37–9).

Appendix 1
Specific Gravity and Gold Purity

Specific gravity is a measure of density commonly employed to estimate the purity of gold coins. It has no units as it is measured as a ratio to the density of water. So, for example, gold which has a specific gravity of approximately 19.3 is a little over 19 times denser than water. Specific gravity is measured by weighing a coin in air and in a liquid and comparing the results of those measurements with the density of the liquid (Oddy 1972: eq.2):

$$SG_c = \frac{w_a SG_l}{w_a - w_l}$$

SG_c = Specific gravity of the coin
SG_l = Specific gravity of the liquid
W_a = Weight of the coin in air
W_l = Weight of the coin in liquid

The specific gravity (usually abbreviated SG) is a useful indicator of gold purity because gold (SG≈19.3) is much denser than silver (SG≈10.5) and copper (SG≈8.9), the elements it is most commonly alloyed with. For that reason it is possible to estimate the gold purity of a coin by measuring its specific gravity. In the catalogue an SG value has been listed where one is available for that coin. These are discussed at various points in Chapters 2 and 3. In those chapters, to aid the reader, a percentage gold purity is also listed. This was calculated by assuming that roughly 70% of the alloy mixture was copper and the remainder silver, and the conversions are shown in **Table A1.1**.

Some caveats are in order. Specific gravity is best used as a metric, like diameter, weight or die axis, and not as an analytic technique like XRF, ICPMS, neutron activation or chemical methods (discussed below). The reason for this is that there are a wide variety of factors that could affect the SG which are not directly related to its gold purity. In the experience of the authors when analytic techniques are used to measure gold content it is usually found to differ from that indicated by specific gravity, a phenomenon noted elsewhere (Munro-Hay *et al.* 1988; Cabral *et al.* 1998).

However, used simply as a measure of density it has considerable value. The degree to which coins from the same period of production at the same mint exhibit the same SG values indicates the degree to which the mint maintained a consistent alloy. If mints differ in the same period it indicates they are not drawing on a common source of already alloyed metal. In general Kushan mints are very consistent but this is not to be taken for granted. As noted in the literature Gupta gold coins show very little consistency in their gold purity, however it is measured. And, while caveats are in order, if SG values show consistent trends they can identify patterns of debasement in the coinage.

Prior analysis of Kushan coins

The earliest analysis of Kushan coins was reported by Cunningham (1894: 16) though he gives only averages and no indication of method or which coins were tested. These initially suggested that the gold content was stable (112.75 grains in 123 grains, 91.7%) until the time of Vasudeva. A result which has been broadly borne out by subsequent work but which can now be subject to more nuance. The first

% gold	SG	% gold	SG	% gold	SG	% gold	SG
100	19.32	75	15.67	50	13.18	25	11.38
99	19.14	74	15.55	49	13.10	24	11.31
98	18.97	73	15.44	48	13.02	23	11.25
97	18.80	72	15.32	47	12.94	22	11.19
96	18.63	71	15.21	46	12.86	21	11.13
95	18.46	70	15.10	45	12.78	20	11.07
94	18.30	69	14.99	44	12.70	19	11.01
93	18.14	68	14.88	43	12.62	18	10.95
92	17.98	67	14.78	42	12.54	17	10.90
91	17.83	66	14.67	41	12.47	16	10.84
90	17.67	65	14.57	40	12.39	15	10.78
89	17.53	64	14.47	39	12.32	14	10.73
88	17.38	63	14.37	38	12.25	13	10.67
87	17.23	62	14.27	37	12.18	12	10.62
86	17.09	61	14.17	36	12.11	11	10.56
85	16.95	60	14.08	35	12.04	10	10.51
84	16.81	59	13.98	34	11.97	9	10.46
83	16.68	58	13.89	33	11.90	8	10.41
82	16.55	57	13.80	32	11.83	7	10.35
81	16.42	56	13.70	31	11.76	6	10.30
80	16.29	55	13.61	30	11.70	5	10.25
79	16.16	54	13.53	29	11.63	4	10.20
78	16.04	53	13.44	28	11.57	3	10.15
77	15.91	52	13.35	27	11.50	2	10.10
76	15.79	51	13.27	26	11.44	1	10.05

Table A1.1 Percentage gold purity used as indicative for particular SG values

specific gravity analysis of Kushan coins was undertaken by Maity (1958), he made measurements of 99 coins in the Indian Museum, Calcutta, excluding those with holes or attachments. This constitutes about 2/3 of that museums present collection. The results as published include SG and the IMC catalogue number for each coin. It established clearly for the first time that the gold content was reduced over time. Maity (1970: 74) later reported specific gravity measurements for eleven British Museum coins measured by John Walker. The next study was initiated by Mukherjee (1978) who asked Miss Jaya Goswami to re-examine coins in the Indian Museum and Mr K.A. Howes to examine British Museum coins. From Calcutta 149 coins were examined, almost the entire collection. From the British Museum 56 coins were examined, all from Kanishka II onwards (labelled Kanishka III in the publications, see Ch. 2, §5.G.2). The IMC coins have catalogue references which allow them to be traced, and a temporary record was made in the Coins & Medals Department of the British Museum with the coin itself, some of which have survived and can therefore be connected to particular coins. Since that time measurements have been made of the gold coins in the Bharat Kala Bhavan, Varanasi, and are recorded in its catalogue (Sharma 1999).

These tests broadly established the relative purity of coins from Wima Kadphises to Vasudeva I and that there was a clear, and marked, subsequent decline, but they are of limited value today due to concerns over their precision. The margin of error in specific gravity is primarily a function of errors in weighing the coins, so the more accurately the coin is weighed the smaller the margin of error will be in the SG. SGs will be more accurate if measured in denser liquids, for heavy coins than lighter ones, and counter-intuitively for coins with lower SGs (because the gap between the weight in air and weight in liquid, as the coin is more buoyant, will be larger). Andrew Oddy at the British Museum pioneered the use of very precise techniques for measuring SG from the 1970s (Oddy and Hughes 1972; Oddy 1972; Oddy and Blackshaw 1974; Oddy 1998). By using a denser liquid, high precision scales shielded from air movements and vibration, and calibrating the tests, he was able to substantially reduce the error. Oddy reported (1970) an error of ±0.04 but it is likely to be substantially lower than that. However, comparisons with older tests, using less precise equipment indicate that the margins of error in older tests are quite large, perhaps of the order of ±0.4 (see Bracey and Oddy 2010), and there are substantial disagreements between previous tests. Such margins of error would be more pronounced than results for many ancient techniques such as the touchstone (Brill 1997; Healy 1978: 206) and so will likely obscure important patterns, patterns that might have been apparent to contemporaries.

For this reason older results have not been reported in the catalogue. The results reported come primarily from two

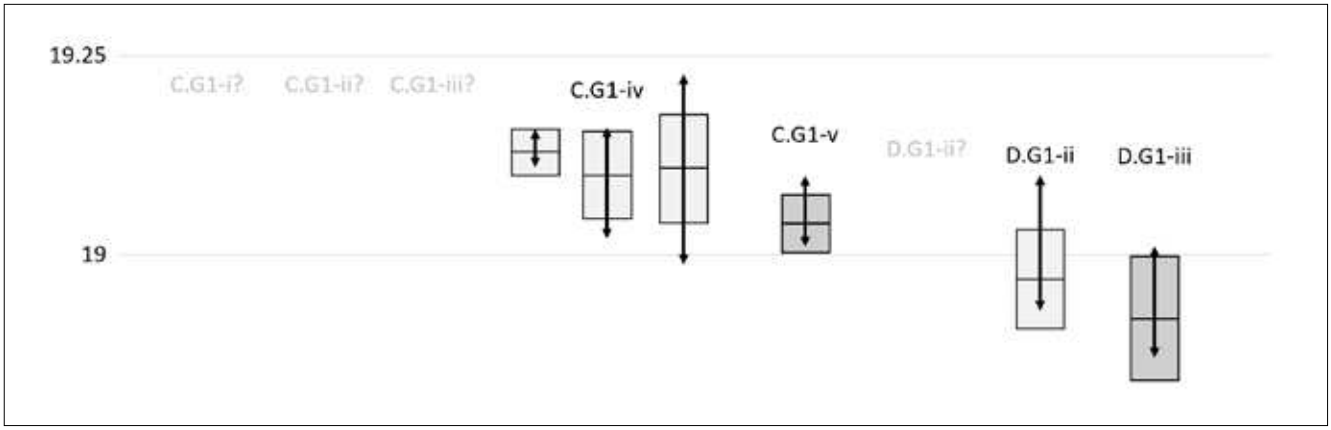


Figure A1.1 Specific gravity values for gold coins of Wima Kadphises and Kanishka I. Only values represented by three or more examples are shown (19.32 = pure gold)

sources. Between 1980 and 1984 Andrew Oddy made SG measurements on coins in the British Museum, from private collections, and from the numismatic trade. Altogether Oddy measured 161 Kushan coins from the British Museum. Most of these were from Vasudeva onwards. In addition, he analysed 29 Sasanian, 19 Kushano-Sasanian, and 80 Kidarite coins in the British Museum and 267 coins supplied by professional numismatists or private collectors, including coins from the Craig Burns collection now in the Bern Museum in Switzerland (Göbl 1993). These results were used in a study of the gold purity of Kushano-Sasanian coins (Cribb and Oddy 1998) and subsequently published in detail (Bracey and Oddy 2010). In addition to this data the catalogue reports a number of results for British Museum coins measured, using similar high precision techniques, by Duncan Hook and Maxime Callawaert, primarily in 2010. Results are also available, independently for the coins in the Bern Museum (Göbl 1993, 87–91). In some cases the coin was measured by Oddy and subsequently upon acquisition.

The utility of this sort of data depends both on its accuracy and on its quantity. A single very accurate measurement might be of an exceptional coin, while a large body of data with too large a margin of error will fail to show important patterns. The best sorts of data involve large numbers of results, often from the same type (or in ideal circumstances the same dies), by methods which are directly comparable. The high precision SG results, more than 500, are for this reason the best source of data currently available for the study of gold purity in Kushan coins.

At the end of this appendix the data available is presented in a table by phase of production (**Table A1.2**), for every phase in which at least three results are available (drawing on a collected sample of 462 coins). This data has informed discussions in Chapters 2 and 3. It is important to make clear the limits of such data.

Figure A1.1 shows a dynamite plot for the first eight phases of Kushan gold coinage. The middle of each block indicates the mean value, the block itself indicates one standard deviation each side of the mean (in a normal distribution this would encompass about two-thirds of the values) and the arrows show the range of values. The standard deviations are subject to a correction intended to mitigate the tendency of small samples to under-represent the variability of the population they are drawn from (known as Bressel's correction). This is why the standard deviation is often larger than the actual range, and is an artefact of the data.

As can be seen, the averages of the three denominations of phase 4 under Wima Kadphises differ but the averages of each sample fall within a standard deviation of the averages of the others. There is therefore no reason to presume that there is any real difference, the mint no doubt aimed to make all the same purity. How much does the difference in a sample imply that the mint was trying to make coins of different purity? The answer depends on how much confidence is desired in the conclusion.

There can be no reasonable question that the third phase of Kanishka was made from a lower purity of gold than the fourth phase under Wima Kadphises. But it is more difficult to decide if phase two of Kanishka differs only in the sample. As the two means fall within the standard deviation of the other, that is very likely.

Reconstructing the full details of what happened is hindered by a lack of data. Four of the eight phases are simply not known from enough coins to draw any conclusions. A similar problem recurs throughout the series, with frequent gaps. However, the data presented here is significantly more comprehensive, more granular, and more robust than has previously been available for Kushan coins and warrants some significant re-assessments.

Analytic methods

This data can be usefully supplemented by results from analytic methods. Most useful are the results of nuclear activation analysis. In nuclear activation analysis the object (or a sample from it) is bombarded with parcels of charged particles, these interact with the elements present to produce radioactive isotopes. The emissions (particularly the gamma wave radiation) are then measured, and compared with a known sample, to establish the amount of each element present. Largely overlooked in the literature Meyers (1969) used neutron activation to measure Roman gold in a Netherlands collection and included, as a comparison, four Kanishka and five Vasudeva coins. The results of that test indicated that the alloy contained a 2:1 silver to copper ratio. A sample of the coins in the Bibliotheque National, Paris, have been also been examined with Proton Activation (Blet-Lemarquand 2003; 2006; Blet-Lemarquand *et al.* 2002; 2003

Sachs *et al.* 2003). These studies include Paris accession numbers but not images in most cases. These tests indicated that the ratio of silver to copper was about 2.3:1. These silver to copper ratios informed those used to generate **Table A1.1** above. It should also be noted that a relatively consistent ratio was probably a function of mint practice intended to preserve the colour of the coins. The limited tests on other contemporary gold objects show they are alloyed almost entirely with silver (Guerra 2009).

In addition the French studies have also employed laser ablation ICPMS (inductively coupled plasma mass spectroscopy) (Blet-Lemarquand and Pointing 2009). This is a spot technique that uses a laser to allow spectroscopic analysis of a small sample of the coin. Though it runs similar risks to other techniques which depend on a small sample, that the coin might not be homogenous, it does penetrate into the fabric and thus avoids any surface contamination. ICPMS has the capacity to detect trace elements, such as platinum and palladium, and the tests were undertaken to establish sources of metal (see Bracey 2011 for commentary). The main conclusion that can be drawn is that Kushan and contemporary Roman coins show very different trace elements and thus Kushan coins were not produced from imported Roman gold, as first suggested by Warmington and frequently repeated.

The other widely used technique for analysing coins is XRF. This is a relatively inexpensive technique to apply but has several drawbacks. It usually only measures a spot on the surface of the coin and is unable to detect trace elements due to is relatively low sensitivity. Like specific gravity its strength would lie in the analysis of a very large number of coins under common conditions, thus making it possible to identify patterns even if the absolute numbers were not reliable. Unfortunately relatively few XRF analysis of Kushan gold coins have been published. And it is for these reasons that in discussing the trends of Kushan gold fineness in Chapter 3 we have primarily depended on the more substantial SG data.

Far less data is available for Kushan copper coins (Mamania and Singh 2019; Fang *et al.* 2011; Rajurkar *et al.* 1993; Stroeters *et al.* 2012; Stroeters *et al.* 2013; Tandon 1967). SG is not a useful metric for base metal coins as there are no substantial differences in the density of the various metals making up the bulk of the alloy. Copper alloys also tend to be less homogenous than precious metal coins making it likely that spot techniques, such as most XRF and laser ablation ICPMS, might throw up a significant number of erroneous results. Those analytic tests, much more so than SG, also have issues of calibration which make it very difficult to compare results produced by different groups using different techniques or apparatus. This prevents simply combining existing published data. There is also, as with the gold, the issue of trying to use tests often performed by scientists unfamiliar with the coins or historical technique, and frequently misattributing them. For example, both Angal *et al.* (1993) and Lal *et al.* (1991) misidentify the coins they are analysing. In the latter case the misidentification is itself quite interesting because the coin, actually an issue of the Yaudehya republic, shows a high iron content (11.29–25.32%). This high iron content is a known feature of coins from Kashmir (Tanner 1979), including Kushan (Bhat *et al.* 1994) which are often magnetic as a result, but is surprising for a coin from the Punjab.

Phase	Mean (μ)	Standard Deviation (σ)	Range	Number of measurements (n)
C.G1-iv ¼d	19.13	0.029	19.11-19.16	3
C.G1-iv 1d	19.10	0.055	19.02-19.16	6
C.G1-iv 2d	19.11	0.069	18.99-19.23	9
C.G1-v 1d	19.04	0.036	19.01-19.10	6
D.G1-ii 1d	18.97	0.062	18.93-19.10	10
D.G1-iii 1d	18.92	0.078	18.87-19.01	3
D.G2-i 1d	19.07	0.055	19.02-19.13	3
E.G1-ii ¼d	18.71	0.126	18.55-18.83	5
E.G1-ii 1d	18.64	0.309	18.20-18.87	4
E.G1-v 1d	18.60	0.075	18.52-18.67	3
E.G2-iii 1d	18.65	0.136	18.41-18.86	16
E.G2-iv 1d	18.42	0.271	18.08-18.71	6
F.G1-i ¼d	18.62	0.149	18.46-18.76	5
F.G1-i 1d	18.60	0.290	18.42-19.11	5
F.G1-ii 1d	18.61	0.144	18.42-18.86	17
F.G1-iii 1d	18.69	0.155	18.52-18.82	3
F.G1-v 1d	18.73	0.226	18.33-19.12	10
F.G2-ii 1d	18.61	0.066	18.53-18.69	4
F.G2-iii 1d	18.90	0.048	18.85-18.95	4
F.G2-iv 1d	18.86	0.078	18.74-18.97	7
F-imit.G1-ii 1d	18.07	0.274	17.48-18.29	8
F-imit.G1-iii 1d	17.15	0.834	15.22-17.91	9
F-imit.G1-iv 1d	16.55	0.574	15.79-17.30	6
G.G1-i 1d	17.51	0.885	16.78-18.98	5
H.G1-i 1d	17.45	0.335	16.93-17.77	5
H.G1-ii ¼d	16.39	0.087	16.32-16.49	3
H.G1-ii 1d	17.21	0.202	17.06-17.54	5
H.G1-iii 1d	17.89	0.396	17.14-18.62	9
H.G2-ii 1d	17.50	1.158	14.30-18.31	10
I.G1-i 1d	17.95	0.079	17.88-18.06	4
J.G1-ii 1d	17.55	0.430	16.83-18.11	7
J.G1-iii 1d	16.99	0.422	16.30-17.61	9
J.G1-iv 1d	16.80	0.675	14.43-17.42	17
J.G2-i 1d	18.12	0.574	17.62-18.58	6
J.G2-ii 1d	18.46	0.092	18.31-18.58	9
K.G2-i 1d	16.07	0.151	15.91-16.28	5
L.G1-i 1d	16.11	0.120	15.91-16.32	11
L.G1-ii 1d	14.25	0.451	13.05-14.86	13
L.G2-i 1d	15.28	0.927	13.46-16.20	13
L.G2-ii 1d	13.67	0.264	13.42-14.30	13
M.G1-i 1d	13.32	0.512	11.23-13.63	20
M.G1-ii 1d	11.13	1.564	8.34-13.41	41
O.G1-ii 1d	14.20	0.152	13.97-14.30	4
O.G2-iii 1d	14.12	0.280	13.74-14.31	17
Q.G1-i 1d	14.04	0.191	13.90-14.31	4
Q.G1-ii 1d	13.46	1.312	9.98-14.06	9
Q.G1-iii/iv 1d	12.19	0.868	8.62-13.70	45
Q.G2-i 1d	12.63	0.551	11.88-12.63	7
Q.G3-ref	11.40	0.817	9.77-12.15	11
T.G1-ii 1d	15.89	0.132	15.79-16.12	5
Y-O.G1-iii 1d	13.87	0.531	13.55-14.48	3

Table A1.2 Specific Gravity by phase of production

Appendix 2
Inscriptions on Kushan, Kushano-Sasanian and Kidarite Hun Coins

The inscriptions on the coins listed in this catalogue show an amazing variety, reflecting the location of the Kushan empire and its successors at the 'Crossroads of Asia'. Local languages, Gandhari and Bactrian, are used as well as the languages of conquerors and neighbours, Greek, Middle Persian and Epigraphical Hybrid Sanskrit. The scripts used to write these languages are also various: Kharoshthi for Gandhari, Greek for Greek, adapted Greek for Bactrian, Pahlavi for Middle Persian and Brahmi for Epigraphical Hybrid Sanskrit (**Table A2.1**).

On most coins, inscriptions were formulaic and conventional, with forms persisting over long periods of time. The location of the region in between differing linguistic and scriptorial traditions also brought about innovations.

Kushan coin inscriptions

Early Kushan coins used forms of inscriptions which can be traced back to earlier Greek coins being produced in the area. The first Kushan issues north of the Hindu Kush were inscribed in Greek using formulae going back to the time of the Greco-Bactrian kings Eucratides I (*c.* 175–145 BC) and Heliocles (*c.* 145–90 BC), while issues south of the Hindu Kush were bilingual, adding a Gandhari translation of the Greek, following the practice established under the Indo-Greek kings Apollodotus (*c.* 180–170 BC) and Antimachus (*c.* 170–160 BC), and continued by the Indo-Scythian and Indo-Parthian rulers who succeeded the Indo-Greeks. Both Greek and Gandhari inscriptions were placed around the edge of the coins, enclosing the pictorial designs. In Bactria/Tokharistan the Greek inscriptions were normally on the reverse, but south of the Hindu Kush they were on the obverse, with the Gandhari translations on the reverse.

The coins of Kujula Kadphises north of the Hindu Kush either copied the existing Greek inscriptions of their Greco-Bactrian prototypes (A.C1) or introduced new terminology in the formulae (A.S2), while following the Greek arrangement. The copied inscriptions became degenerate as their function on the Kushan issues was to mimic the whole of the prototype's design, without any desire to be read or to provide the identity of the issuer, while the skill of the die engravers diminished. The issues with new terminology introduced new designs, still within the framework of their prototypes, and accordingly the inscriptions followed the Greek model by including the identity of the issuer and giving his name and titles, but new titles (ΤΥΡΑΝΝΟΥΝΤΟΣ) ΗΙΑΟΥ ((ruling) yabgu) were used in place of the Greek ΒΑΣΙΛΕΩΣ (ΜΕΓΑΛΟΥ) ((great) king).

South of the Hindu Kush there were also some designs which merely copied the Greek inscriptions of their prototypes in the name of the Indo-Greek king Hermaeus (A.C2A) and of the Indo-Scythian ruler Zeionises (A.C6), but, as north of the Hindu Kush, with little attention to accuracy. On other issues Greek obverse inscriptions remained the norm, but with some innovations, again using the name and title of Kujula Kadphises. His coins followed the Indo-Greek bilingual practice, except their Gandhari inscriptions were rarely precise translations of the Greek on the obverse, but still identifying Kujula Kadphises. New terms were added, such as the Gandhari versions of the

King's name and titles etc.	G K	G	B	B	B S	[B] S	S	King's name and titles etc.	P	P	B	[B]	B	B P	B
Control marks			K	S B K	S	S	S	**Control marks**		B			B S		B S P
Kujula Kadphises	x	x	x												
Wima Takto	x	x	x												
Wima Kadphises	x	x													
Kanishka I		x	x												
Huvishka			x												
Vasudeva I			x	x											
Kaniṣhka II				x				**Ardashir I**	x						
Vasiṣhka				x				**Ardashir II**	x	x	x				
Kaniṣhka III				x				**Peroz I**	x				x	x	
Vasudeva II				x	x	x		**Hormizd I**	x		x		x	x	x
Mahi						x									
Ṣhaka						x	x	**Hormizd II**	x				x	x	
Kipunadha							x	**Peroz II**	x		x				x
Kirada etc.							x	**Shapur II**	x		x				
Peroz							x	**Varahran**	x		x		x		x
Kidara							x	**Kidara**			x		x		x
Samudra							x	**Orōlano**							x
								Pidoko			x		x		
								Tobazino			x				
								Ōkilano				x			
								Ōzmano?				x			
								Peroz			x				
								unidentified				x			
								Mehama			x				
								Adomano			x				

G = Greek in Greek script; K = Gandhari in Kharoshthi script; B = Bactrian in adapted Greek script; [B] = blundered and illegible Bactrian; S = Epigraphical Hybrid Sanskrit in Brahmi; P = Middle Persian in Pahlavi script

Table A2.1 Distribution of the use of languages and scripts on Kushan, Kushano-Sasanian, Kidarite Hun and Hephthalite coins (relative chronology is approximate)

Kushan title yabgu, and an epithet (*saca*)*dharmathida* (steadfast in the (true) law), not used on the Greek obverses. The yabgu title also appeared in Greek in place of the Greek title for king on some obverses (A.C4). The imperial title, ΒΑΣΙΛΕΩΣ ΒΑΣΙΛΕΩΝ (king of kings) in Greek and *rajatiraja* in Gandhari, was also introduced on some early Kushan issues (A.S3 and A.S4, A.C6), borrowed from their Indo-Scythian and Indo-Parthian predecessors.

On two issues (A.C2B-ii, A.C5) Greek script was used to write inscriptions which appear from their inflections -EI to be Bactrian (or a related Iranian language): Kujula Kadphises' name written as: ΚΟΖΟΥΛΟ ΚΑΔΟΒΙΚΕΙ ΚΟΡΣΑΝ (A.C5) or ΚΟΖΟΥΛΟ ΚΑΔΦΙΣΕΙ ΚΟΡΣΑΝΕΙ (A.C2B-ii). On another issue the Kharoshthi inscription seems to have been used to write Epigraphical Hybrid Sanskrit rather than Gandhari, as the genitive inflections have -*sya* in place of the Gandhari -*sa*, and one of the vowels is marked as long *jū*, in a way not normally found in Kharoshthi of this period (Salomon 1998, 56 and 2002b, 127–8 discusses the use of Kharoshthi to write Sanskrit in later documents). The die cutter of this inscription also seems to have had influence from India as on one variety he used the Indian title *svami* (A.C2B-i, reverse 1b), only otherwise attested at this period on the coins of the Western Satrap rulers on India's western coast. These coin types, made at Kujula Kadphises' Begram copper mint (A.C2B-i and -ii) and at an unknown location (A.C5), seem to represent the earliest use of Bactrian so far documented and the earliest use of Kharoshthi to write Sanskrit. Although Bactrian seems the most likely language for this -ει inflection, the possibility of a different Iranian language cannot be ruled out as the same inflection is found on coins of the Indo-Scythian satrap Kharahostes (Cribb 2015, 40), ΧΑΡΑΗΩΣΤΕΙ ΣΑΤΡΑΠΕΙ ΑΡΤΑΣ ΥΙΟΥ (of Kharahostes, Satrap, son of Arta). The inscription mixes the Iranian language and Greek as the final word ὑιου has the normal Greek genitive inflection. Another example of a Kharahostes coin further mixes Iranian, Greek and

Gandhari as the word ὑιου is replaced with ΠΟΤΡΟΣ, a Hellenised version of the Gandhari *putrasa*, i.e. of the son of … (*ibid.*).

The Soter Megas coinage issued from the end of the reign of Kujula Kadphises and through the reign of Wima Takto introduced the northern use of a Greek inscription on the reverse to mints south of the Hindu Kush (Begram B.C1 and Mathura B.C4). This innovation was accompanied by another which meant that the king's name was omitted from the inscription. The titles used, ΣΩΤΗΡ ΜΕΓΑΣ in Greek and *mahatasa tratarasa* in Gandhari, however, were adopted from Indo-Parthian coinage. The mints in Gandhara (B.S1) and Kashmir (B.C5) continued to have Gandhari inscriptions on the reverse. The understanding of the inscriptions by their makers must have been limited as the nominative was used for the Greek, but the genitive for the Gandhari on the coins from the Gandhara mint (B.S1). One issue of coins by Wima Takto seems to be inscribed in Bactrian (B.C6).

After an initial copper issue with just a Greek inscription, the coinage of Wima Kadphises reverted to the usual bilingual inscription practice inherited from the Indo-Scythians and Indo-Parthians, but like the issues of Kujula Kadphises, the Gandhari on the reverse was not a translation of the Greek on the obverse, but added titles not previously used, entitling the king *sarvaloga'iśvara, mahiśvara* (lord of the whole world, great lord). As on the coins of Wima Takto the mixture of nominative case for the Greek and genitive for the Gandhari continued.

A change to the practices inherited from their predecessors took place in the reign of Kanishka I, when Greek was used on both sides of his coins (D.G1-i and D.C1-i), and instead of a translation or expansion of the obverse inscription the reverse inscription was a label for the deity depicted on the reverse. This innovation could have been a practical way of identifying the gods whose iconography was still an innovation or it has been suggested (Göbl 1984, 20) that it was introduced in emulation of Roman practice, where the labelling of gods in the nominative on Roman coins became popular from the time of Nero (AD 54–68). The Greek on the obverse seems confused as Kanishka's name seems to be in the genitive ΚΑΝΗΡΚΟΥ, while his title is in the nominative ΒΑΣΙΛΕΥΣ ΒΑΣΙΛΕΩΝ. While the first dies were still in use, another major innovation took place, when the Greek inscriptions on both sides were replaced by Bactrian ones (Ch. 3 §D.1). The shortness of the reverse labelling inscriptions also meant that they no longer encircled the design, but were normally placed alongside the image (except for the longer inscriptions on Kanishka I's Buddha image coins D.C1-iii, reverses 14a–n and 15a–g which encircle the designs). This remained the practice for the rest of the dynasty, but with a gradually diminishing ability to write Bactrian accurately and clearly. From the reigns of Vasishka and Vasudeva II the Bactrian inscriptions were often blundered and/or illegible.

The degeneration of the Bactrian inscriptions gave rise to a different practice, where Epigraphical Hybrid Sanskrit (for this term see Damsteegt 1978; Salomon 1998, 81) inscriptions in Brahmi were placed in the field of the coins to indicate the issuer, as a more legible substitute for the Bactrian inscriptions. The use of Brahmi first appeared on Kushan coins in the reign of Vasudeva I, when single letters or vertical monograms began to appear in the field, particularly on the obverse, as control marks used to indicate administrative control of mint practice. The meaning of these control marks is not accessible, but their use indicates gradual shifts in administration suggestive of the individuals responsible for aspects of controlling the production of coins. Greek letters were also occasionally used in the same way, and Kharoshthi letters had played this role in the reigns of Kanishka I (D.C3) and Huvishka (E.C3) and continued to do so occasionally. On coins of one series of Huvishka (E.C2-i and -ii) a Kharoshthi inscription *yodhavade* was used to name such an individual and on some coins of another of Huvishka's issues (E.C2-iii, reverse 4i) a Bactrian inscription ΟΜΟΙΑΓΟΓΑΝΟ ΚΑΡΑΛΡΑΓΓΟ identified, not only the name *Omoiagogano*, but also the rank *karalrang* of that person, a very high official of the Kushan king. It seems likely that the Kharoshthi, Greek and Brahmi letters and monograms on later coins had a similar function. From Kanishka II, Brahmi control marks became the norm, but a few Greek and Kharoshthi marks continued to appear during the reign of Vasishka.

The practice of putting Brahmi control marks in the field was given a different function in the reign of Vasudeva II. At his main gold mint (J.G1), the largest mark in the right-hand field: *vasu*, written as a vertical monogram, appears to have been intended to identify the king under whose authority the coins were issued. By this date the Bactrian territory of the Kushans had been lost, so it is possible that the administration thought that Brahmi would serve the purpose better than the Bactrian inscription round the edge of the coins. This practice continued throughout the rest of the dynasty. For the reign of Vasudeva II the Bactrian inscriptions were still legible enough for us to understand the purpose of the *vasu* monogram and to be aware that it is an abbreviation of the king's name. Later coins do not provide that kind of insight, so we can only know the kings by the part of their name which appears in the monogram, *mahi*, *shaka* (or *shāka*) and *kipunadha* (and the usurper *meśra*). The monograms of later rulers, such as Kidara and Samudra who are known from other sources, confirm that these are names. It has been suggested that the vertical form of these monograms was influenced by contacts with the Chinese practice of writing in vertical columns: 'monograms written vertically in the Central Asian fashion' (Allan *et al.* 1934, 79) and 'the letters appear to be names or parts of names, written vertically in the Chinese fashion' (Gupta 1969, 31), but this influence seems implausible and it is more likely that the monograms represent an adaptation of the verticality of writing consonant clusters in Brahmi. The monograms are clearly assembled from complete characters joined together, and this is most evident on the coins with the name of the Kidarite ruler Peroz written as *peroysa* (see below), with the vowels of *pe* and *ro* clearly marked and finishing with the consonant cluster *ysa*, known from other coins as the cluster used to render the non-Indian sound *za* (Tandon 2009b).

Copper coinage followed a similar pattern of change to the gold, but lost its intelligible Bactrian inscriptions well before the gold and generally has fewer control marks. On

the copper coins of Vasudeva II the same *vasu* monogram is to be found (J.C1, J.C3) identifying their issuer. In most cases late Kushan copper coins are identified by their position in the changing pattern of coinage and by occasional control mark links to the gold. In a few cases the Brahmi monograms or control marks were used as the whole design in place of the royal image (J.C2). A similar practice is observed in the coins of the late Kushan-period Kota state in the Punjab, inscribed with the vertical monogram *kota* (Ch. 2 §H.6.1).

Kidarite Kushan-style coin inscriptions

In the reign of the last Kushan king Kipunadha, gold coins began to be issued by the Kidarite Huns in Gandhara. They followed the same formula of inscription as the coins of Kipunadha, placing a Brahmi monogram of the ruler's name in the right field. Issues of Kirada, Yosa, Yasada, Hanaka, Peroz and Kidara followed this formula. The last of these rulers, Kidara, is known from textual sources (see Ch. 2 §Y–Z.1), so the appearance of his name in the right-hand field of the obverse of Kushan-style coins confirms the understanding that these Brahmi monograms represent the names of rulers. Another issue of the Kidarite Hun period also supports the same understanding, as coins in the Kushan style, showing a standing figure wearing the crown of Kidara, known from his Bactrian issues (Z.G1-i), is inscribed with the abbreviated name of the Gupta king Samudragupta, written in the same way as the Brahmi monogram *samudra* on his Indian issues (Allan 1936, 1–7).

In addition to the names, the Brahmi monograms in the obverse right-hand field also provide for the first time some intelligible information. On the coins of Kidarite Hun rulers Yosa, Yasada, Kirada and Peroz, the Brahmi monogram *gadahara* appears and on Kidara's coins the monogram *kuṣaṇa*. These seem to indicate that the named ruler's domain was Gandhara and in the case of Kidara the whole of the former Kushan realm. The same regional designation, spelt *gadagra* or *gadakhara*, appears on the coins of Samudra. On copper coins of Peroz, the monogram names him or his domain (P.C1). The gold coin in the name of Hanaka is unique in including a title *ṣāhi* (king). The wide range of Kidarite coppers from Gandhara are not covered by this catalogue, as they were catalogued by Khan *et al.* (2008) and Vondrovec (2014), but they also occasionally include the title *ṣāha* (Vondrovec 2014, types GC–K3, K4, K6, K11). In most cases their inscriptions are in Brahmi and they name local rulers under the Kidarites. The title *ṣāha* or its abbreviated form *ṣā* also appears on Kidarite silver coins of Peroz (Vondrovec 2014, type 3) and Kidara (Vondrovec 2014, types 11, 14 and 16).

Kushano-Sasanian coin inscriptions

When the Sasanian Kushanshahs took over the northern part of Kushan territory (Ch. 2 §R–Y.1) some of their first issues were copies of Kushan coins, often with blundered Bactrian inscriptions, in some cases with Brahmi control marks (F-imit.G1-iv, F-imit.C1-i). At the same time they also issued coins in Balkh inscribed with Middle Persian inscriptions, following the model of Sasanian coins issued in Iran. These inscriptions, written in Pahlavi, were around the edges of the pictorial designs and gave the name and titles of the issue, but also with the innovation, following Kushan practice, of labelling the divine images. In the reign of the second Sasanian Kushanshah Ardashir II, as well as coins inscribed in Middle Persian, including some with Bactrian control marks (S.C1), he also issued some which were more closely based on Kushan coin designs and included Bactrian inscriptions in Greek script giving the issuer's name and titles and labelling the divine images (S.G1, S.C2). The Bactrian inscriptions included Bactrian borrowings of Middle Persian words, such as MIYPO, from *myhr*, the name of Mithra, OOZOPKO from *wzrg*, meaning 'great', both BAΓO from *bg* and IAZAΔO from *yzd* meaning 'divine being', BOPZAOANΔO from *bwrz'wnd* meaning 'high' and ÞAYO from *š'h* meaning king and ÞAYONO ÞAYO from *š'h'nš'h* meaning 'king of kings'. After the imitation series the third Kushanshah Peroz I issued gold (T.G1) and copper coins (T.C1) with Bactrian inscriptions in Balkh, but with Brahmi control marks. Towards the end of his reign he also issued silver (T.S1) and copper coins (T.C1-iii) with Middle Persian inscriptions, like his predecessor. The only example of the silver coinage had a Brahmi control mark on its reverse. The copper coins had a Bactrian inscription on their reverse. Peroz I also opened a mint south of the Hindu Kush, where the gold (T.G2) and copper coins (T.C2) were also inscribed in Bactrian. At both mints some coins had a Brahmi letter, which appears to have been the initial letter *pe* of the king's name, or a Bactrian control mark.

In the reign of the fourth Kushanshah another innovation took place, the addition of mint names: Bactrian BAXΛO (Balkh) on some of his Balkh gold coins (from U.G1-ii), Middle Persian *mrwy* (Merv) on some of his gold (U.G3) and silver coins (U.S1) and *hlywy* (Herat?) on a so-far-unique silver coin (U.S2). Otherwise his Balkh mint coins followed the practice established under his predecessor using Bactrian and Middle Persian inscriptions and Brahmi control marks. On his issues south of the Hindu Kush the first copper issue had his own name in Middle Persian (U.C2-i), but this was followed by issues with Bactrian inscriptions, naming his local governors, first Kavad (U.C2-ii and -iii) and then Mēzē (U.C2-iv). As in the previous reign Brahmi and Bactrian control marks were occasionally used. His successors Hormizd II, Peroz II and Varahran followed the same practices, except Hormizd II issued a gold coin from his Balkh mint (V.G1) with Bactrian on the obverse and Middle Persian on the reverse. Brahmi and Bactrian control marks continued to be occasionally used. A newly discovered silver coin in the name of Varahran has a Middle Persian mint name on the reverse: *bhly* for Balkh (Ch. 1 §2.2.4).

Varahran issued no coins south of the Hindu Kush, where coin production was taken over by the Sasanian authorities in the name of emperor Shapur II. His coins either name him (X.C1-ii, X.C2-i) or his governor Kavad (X.C1-i) in Bactrian, except for the first coins of one issue which give Shapur's name in Middle Persian (X.C2-i).

Kushan-Sasanian style Kidarite Hun coin inscriptions

During the reign of the last Sasanian Kushanshah, Bactria came under the control of the Kidarite Huns, but there were

initially no changes to the practice of issuing gold coins with Bactrian inscriptions and copper coins with Middle Persian inscriptions. Control marks in Bactrian continued to be used, but not Brahmi. On a few coins of the early Kidarite coins in the name of Varahran a Middle Persian control mark *b* is probably the initial letter of *bhly*, the name of the Balkh mint. Soon after the Kidarite Hun ruler Kidara came to power he started adding the mint name of Balkh to his coins in Middle Persian *b* (Z.G1-ii) and *bl* or *bh* (Z.G1-iv) and in Brahmi *ba* (Z.G1-ii). At the end of Kidara's reign, copper coinage ceased to be issued at Balkh. Kidara's successors Orōlano (Z-A.G1) and Pidoko (Z-B.G1) also used the same Bactrian and Brahmi control marks. From the beginning of Kidara's reign the quality of the execution of the Bactrian inscriptions deteriorated. The Greek letters AΔO and P became difficult to distinguish, and were often unintentionally repeated. The names of Kidara (Z.G1), Orōlano (Z-A.G1) and Tobazino (Z-C.G1) are fairly clear, but the other names of these late Kidarite Hun rulers are more difficult to be certain of. The ends of the inscriptions also often disappear.

Kushano-Sasanian style post-Kidarite coin inscriptions

The loss of Bactria by the Kidarite Huns to the Sasanian emperor Peroz, *c.* AD 467, did not stop the Balkh mint issuing Kushano-Sasanian style gold coins. The inscriptions on the issues in the name of Peroz (Z-F.G1) follow the same practice as the Kushano-Sasanians and the Kidarites, but without control marks. When Peroz in his turn lost Bactria, Hephthalite rulers took over the Balkh mint and issued coins which still had Bactrian inscriptions. Their first issue is completely illegible, but the other two issues, in the names of Mehama (Z-H.G1) and Adomano (Z-I.G1), are written more legibly. The Kushanshah title was no longer used, either on Peroz's coins or on those of his successors. Peroz used the title ÞAYONO ÞAYO from *š'h'nš'h* meaning 'king of kings', Mehama only used the title king ÞAYO, but the last Hephthalite issuer Adomano introduced a new title MIIPOΣANO ÞAO, meaning 'king of the East' (sunrise) which he also used on his silver coins issued south of the Hindu Kush (Vondrovec 2014, types 86 and 87).

The heritage of Kushan coin inscriptions

In the same way that early Kushan coin inscriptions adopted and then adapted the practices of the Greek, Indo-Scythian and Indo-Parthian states which they succeeded to, the successors of the Kushans adopted and adapted their coin design practices. This is most obvious in the Gupta gold coinage, where the use of vertical Brahmi monograms representing the king's name in the right field under his left arm continued to be used until the end of the dynasty, and was adopted by some successor states, such as the coins of Mahāsenagupta issued in Magadha and Vainyagupta, and of Samāchāradeva, Jayanāga and Śaśāṅka issued in Bengal (Bose and Nasir 2016, 185–90; Kumar 2017, 390–7). The later rulers of Bengal shifted the practice to inscribe their names with one, two or four Brahmi/early Bengali characters under the king's left arm (Bose and Nasir 2016, 154–61, 165–78). The first gold coins of Sri Lanka seem to have borrowed this treatment from Bengal and underneath the left arm of the figure on one side of the gold issues are the four characters, in local script, *laṅka vihu* (or *vibhu*), preceded by the character *śrī* above the arm (Jayasinghe 1997, 318 and 332; Sirisena 2002, 26). This style of inscription continued on Sri Lankan coins until the 15th century. This treatment was also adopted from Sri Lanka by the Chola kings of southern India who replaced the *laṅka vihu* inscription with their name, still in four characters below the figure's left arm: (*śrī*) *rajaraja*, on the gold coins of king Rajararaja (*c.* AD 985–1016) (Chattopadhyaya 1977, 54–5). In northern India the coins imitating Kidarite issues made in Kashmir and the Punjab (Cribb 2016b; Deyell 2016; 2017) continued to have the vertical monogram *kidara* under the king's right arm for several centuries. The coins of the Kashmir kings issued in the 6th to 7th centuries show that the monogram still had meaning as on some issues it was moved to a different position, on the margin of the reverse, but still retained its vertical arrangement (Cribb 2016b).

Epigraphy, palaeography and transcription

The languages used on Kushan, Kidarite Hun and Kushano-Sasanian coins are more diverse than one would normally expect for a coinage system. The exceptional diversity reflects both the location of the Kushan state in between the Iranian and Indian worlds and the changes in political control resulting from the incursion of nomad rulers and the neighbouring Iranian and Indian empires. Apart from royal names there is no evidence on the coins of the probable languages of the nomadic invaders, both Kushan and Hun. The only other indication of nomad origins is the first Kushan king Kujula Kadphises' use of the title *yabgu* (spelt *yavuga, yavu'a and ya'*u'a in Gandhari and ZAOOY or HIA(I)OY in Greek) which was common to various nomad peoples in Central Asia, but appears to have had its origin as the Chinese title *xihou* bestowed through China's diplomatic relations with its nomad neighbours (Cribb 2018b).

Greek

In the early Kushan period, until the first year of the reign of the fourth king Kanishka I, Greek seems to have had an official status for the Kushan state. According to the Rabatak inscription, Bactrian replaced Greek when 'Kanishka … who has inaugurated the year one as the gods pleased and he *issued a Greek *edict (and) then he put it into Aryan' (Sims-Williams 2004, 55–6, lines 1–4). It seems likely that Greek had continued to have some currency in Bactria after the end of the Greek rule, as the inscription on Kujula Kadphises' Bactrian coins had an accurately used and correctly spelt verbal participle (see below). The Dasht-e Nawar inscription (*ibid.*, 95) of Wima Takto shows Bactrian already in use in Kushan royal inscriptions before Kanishka I, but as yet no Kushan inscriptions in Greek, apart from coins, survive to give an indication of its use.

The Greek inscriptions on early Kushan coins reflect the coinage tradition of the region. Coinage arrived in the area before Alexander the Great's conquest (Cribb 2003), but it was the post-Alexander control of northern Afghanistan by the Seleucid empire and its breakaway kingdom of Bactria which firmly established the Greek coinage tradition in the region (Cribb 2007b). This tradition established the practice

of indicating the issuer of a coin by inscribing it in Greek with the genitive of the issuer's name and title on the reverse of the coin, normally in two parallel lines to right and left or above and below the pictorial design. A further development of this practice had been developed in the second quarter of the 2nd century BC with the addition of an epithet, such as ΜΕΓΑΛΟΥ (great) and ΣΩΤΗΡΟΣ (saviour) to the ruler's name and title on the coins, following the practice of Seleucid and Parthian kings, introduced under Antiochus IV (*c.* 175–164 BC) and Mithradates I (*c.* 171–138 BC). When Greek rule moved south of the Hindu Kush about the same time this form of inscription continued to be used, but the Greek formula was moved to the obverse of the coin and was positioned around the design, in a circle on round coins and in a full or part rectangle on square coins. The Greek seems to have been moved to the obverse to allow for a translation of it into Gandhari to be placed in a similar position on the reverse. In the 1st century BC, the Greek titles were sometimes expanded by further epithets, with one Indo-Greek king Apollodotus II having three epithets on his coins.

The Indo-Greek practice was continued by the Indo-Scythian and Indo-Parthian states which took over former Greek territory south of the Hindu Kush. They deployed the inscriptions in the same way, but expanded the royal title to imperial status as 'king of kings', copying this feature from Iran, where coins began to be inscribed 'king of kings' by the Parthian ruler Mithradates II in the last decade of the 2nd century BC. The Indo-Scythians normally had a single epithet attached to their title, and the Indo-Parthians followed the same practice, but on occasions followed Indo-Greek or Parthian practice by expanding their use of epithets (e.g. Senior 2001, type 234 with three Greek epithets). As on the Indo-Greek coins, Indo-Scythian ones had Gandhari translations of the Greek inscriptions on the reverse, but the Indo-Parthians extended the translations by adding extra titles (see below).

When the Kushan state began to issue coins, they tended to fit their new coins into the existing monetary systems and design conventions of the territories they conquered. Apart from the introduction of new terminology, the Greek inscriptions on their coins followed the previous practices. North of the Hindu Kush where the circulating coins were imitations of Bactrian silver coins, the Kushan issues either copied them directly or replaced the Greek inscriptions with their own, but following the same pattern of ruler's name, title and epithet. South of the Hindu Kush, Kushan issues also copied pre-existing Greek inscriptions or substituted them for their own versions, following the Indo-Scythian and Indo-Parthian practice. Like the Indo-Parthians their Gandhari reverse inscriptions added titles not used in the Greek obverse.

The Kushan titles sometimes used Greek terminology and sometimes substituted their own titles for Greek ones. The coin designers clearly had some knowledge of Greek as an issue made north of the Hindu Kush used an unusual Greek term ΤΥΡΑΝΝΟΥΝΤΟΣ (rarely used in Greek texts, but see Diodorus Siculus 9.20.3 and 10.4.3; Oldfield 1946, 26–7, 56–7), a verbal present participle in the genitive as an epithet of the ruler. They also devised Greek versions of the Kushan title yabgu: ΗΙΑΟΥ (A.S2) and ΖΑΟΟΥ (A.C4-i) in the genitive. These forms show the difficulty encountered by the coin designers in transcribing words from other languages into Greek. The Greek version ΖΑΟΟΥ and the Gandhari versions *yavuga, yavua and ya'u'a* can be compared with the transcriptions of the first part of the Kushan ruler's name Kujula, in Greek as ΚΟΖΟΥΛΟ and in Gandhari as *kujula* or *kuyula*, while the other Greek version ηιαου seems to be an attempt to render the *j/y/*ζ sound with the diphthong ηι. In their attempts to render the dynastic name Kushan, the coin designers also encountered a problem sound for Greek. They initially rendered the *sh* sound in various ways as ρ, ρρ or ρσ. The same problem had been encountered by Indo-Scythian coin designers who had to transcribe this sound on the coins in the name of the ruler Spalirises (Gandhari *śpalirisa*). On one variety this was written ΣΠΑΛΡΙΣΟΥ (Senior 2001, type 71), but it was normally transcribed as ΡΠΑΛΡΙΣΟΥ (*ibid.*, types 72–5). By the reign of Wima Takto a fixed way of writing this sound had been developed by extending the upright of the Greek rho ρ to create þ. The earliest surviving use of this character is in the Dasht-e Nawar inscription of Wima Takto (Sims-Williams and Cribb 1995–6, 95 and 136, lines 2, 4 and 6). One of his coin types (B.C6) also appears to use this character, but most of it is off the edge of the coin (the bottom of its vertical stoke is touching the horizontal line of the tamga), so its presence is conjectural.

At the time as the Kushan coinage was commencing, a transition was taking place in Greek coinage inscriptions, both in the area conquered by the Kushans and further west. There were two trends taking place: one in the grammatical case of the inscription and the other in its letter forms.

In the Greek tradition the normal form of inscription was in the genitive case, identifying the coin as 'an issue' of the responsible ruler or state, either literally or via the device of the issuer. The difference between these two possibilities can be traced back to the early stages of Greek coinage. Early 6th-century base-gold coins of Halicarnassus were inscribed either as ΦΑΝΝΟΣ 'of Phanes' or ΦΑΝΝΟΣ ΕΜΙ ΣΕΜΑ 'I am the badge of Phanes'. So it is possible to understand the coins of the Greek kings which provided the Kushans with their prototypes, inscribed ΒΑΣΙΛΕΩΣ ΜΕΓΑΛΟΥ ΕΥΚΡΑΤΙΔΟΥ and ΒΑΣΙΛΕΩΣ ΔΙΚΑΙΟΥ ΗΛΙΟΚΛΕΟΥΣ as meaning [the coin] of 'king Eucratides the great' and [the coin] of 'king Heliocles the just' or [this is the image/device] of 'king Eucratides the great' and [this is the image/device] of 'king Heliocles the just'. The transition taking place was the replacement of genitive forms with nominative ones. This implied that the inscription was a label for the royal image/device, rather than for the coin. This transition seems to have taken place under Roman influence (Burnett 2011b, 13–14). This first manifests itself in the east on coins of Vonones I, the Parthian emperor in Iran, *c.* AD 8–12. Some Indo-Parthian coins of Gondophares (*c.* AD 32–60) mix genitive and nominative inflections: ΒΑΣΙΛΕΩΣ ΒΑΣΙΛΕΩΝ ΜΕΓΑΣ (Senior 2001, types 210 and 212), but from the time of his successors Sarpedanes (*c.* AD 60–70), Sasan (*c.* 60–90), Orthagnes (*c.* 70–90) and Pakores (*c.* 90–120), the correct nominative forms ΒΑΣΙΛΕΥΣ ΒΑΣΙΛΕΩΝ ΜΕΓΑΣ were used (Senior 2001, Sarpedanes type 255, Orthagnes type 257, Sasan type 240,

and Pakores type 269). As far as can be understood, most of Kujula Kadphises' Greek coin inscriptions were in the genitive, with his name ending with the usual inflection ΚΟΖΟΥΛΟ ΚΑΔΦΙΖΟΥ ΚΟΡΣΝ(Α)ΟΥ. On one type issued in Taxila (A.C4-i) the case is difficult to determine as, although the word yabgu is rendered ΖΑΟΟΥ as a genitive, the case of his name is not clear: ΚΟΖΟΛΑ ΚΑΔΑΦΕΣ. The anonymous coinage initiated at the end of his reign and continued through the next reign is clearly written in the nominative case, but with a curious misspelling of the genitive plural: ΒΑΣΙΛΕΥΣ ΒΑΣΙΛΕΥΩΝ ΣΩΤΗΡ ΜΕΓΑΣ. ΒΑΣΙΛΕΥΩΝ looks like a verbal participle, like the genitive ΒΑΣΙΛΕΥΟΝΤΟΣ occurring on some Indo-Parthian coins (Senior 2001, type 228 of Abdagases, *c.* AD 60–70, and type 255 of Sarpedanes), but the Gandhari inscription on the reverse of Wima Takto's Gandhara issues (B.S1) confirm that the genitive plural is intended. The Greek inscriptions on the coins of the next two reigns are in the nominative apart from the apparent genitive form ΚΑΝΗϷΚΟΥ of Kanishka I's name (D.G1-i and D.C1-i).

The changing letter forms of the early Kushan period reflect a broader trend in Greek writing styles of the period. The monumental forms which were normal on the Greek prototypes of the early Kushan coins north of the Hindu Kush, were gradually being superseded by forms developed in handwriting on documents. Such handwritten forms had been in use for a long time, but only began to appear on coins in the 1st century BC. This is particularly noticeable in the simplification of the letter sigma, which came to be written without the central feature, and the use of the lower-case form of omega, with square and curved forms of both being introduced. Early Kushan coins followed the fashion, particularly as it was being gradually adopted by the Indo-Scythian successors and the Indo-Parthians in the states they conquered. By the reign of Wima Kadphises all the older forms of sigma, omega and epsilon had been discarded (**Table A2.2**).

In the catalogue in Volume 2, Greek inscriptions are transcribed into standard Greek letters, whatever their form on the coin. Capital letters are used to represent the coin inscriptions, as they are usually written in capital letters, because coin inscriptions were treated as monumental rather than as documentary (cursive).

Bactrian (Greek script)

In the first year of the reign of Kanishka I, while the first dies at the main gold mint were still in use, they were gradually recut to change the Greek inscriptions into Bactrian. The Bactrian language, referred to as 'Aryan' in the Rabatak inscription, is an Iranian language with affinities to Parthian and Sogdian (Korn 2016) written using the Greek alphabet with the addition of a modified rho, ϸ, to render the sound *sh* and the use of the Greek upsilon, υ, to write the sound *h* (Sims-Williams 1989b, 232). There were other sounds in the languages being transcribed, particularly in names which prompted usages which were not present in Greek script. The initial sound of the names of Wima Takto, Wima Kadphises and Huvishka was written with the syllable οοη, apparently to render the same sound as was rendered in Gandhari using the Kharoshthi syllable *wi* (as in the exceptional form *v'i* of the coins of Wima Kadphises), also written with Kharoshthi as *vi*, *ve*, *gre*, *vha* and *hove*, and in Brahmi as *ve*, *huvi*, *huve* or *hūve*. The Bactrian syllable βα was used to write the sound represented in Kharoshthi as *va* and in Brahmi as *va*, *vā or vvā* (as in the names of Vasudeva I and II and Vasishka).

The adoption of the Bactrian language in official inscriptions on coins and on stone reflects the origins of the Kushan state in northern Bactria, where this seems to have been the local language. The Kushan kings seem from their names to have originally spoken a different language, perhaps an otherwise unknown Iranian language with affinities to Saka (Scythian) (Sims-Williams 2002, 236–40). The Kushan kings identified themselves as Iranian by the way they depicted themselves in sculpture and on their coins, dressed in the same costumes as worn by Iranian peoples further west (Rosenfield 1967, 177) and according to the Rabatak inscription and their coin designs they worshipped Iranian gods. Their adoption of Bactrian, an Iranian language, for their official inscriptions seems to fit their broader conception of their own identity. This manifestation of Iranian identity has been referred to by Fussman (1977) as an Iranian renewal, 'renouveau', as he suggested that the Kushan dynasty set out thereby to show itself as the restorer of Iranian values, 'restauratrice des valeurs iraniennes' and as playing on the anti-Greek sentiments of territory formerly part of Iran under the Achaemenids (*ibid*., 322). This is quite a speculative account as there is no concrete evidence for anti-Greek sentiment and it seems equally plausible that the Kushans presented their identity in this way either because their predecessors, the Indo-Parthians, had done so and/or it reflected their own actual self-identity.

The obverse inscriptions in Bactrian on Kushan coins were very conservative in their content, following the pattern already well established in the Greek inscriptions used on pre-Kushan coins. The titles βαο (king) and βαονανο βαο (king of kings) used were exact translations of the Greek βασιλευς and βασιλευς βασιλεων. No other titles were used, just the king's name and in most cases the dynastic name: (ϷΑΟΝΑΝΟ) ϷΑΟ *name* (ΚΟϷΑΝΟ). There seems to be no distinction between the use of 'king' or 'king of kings' as both were used simultaneously by both Wima Kadphises and Kanishka I.

The reverse inscriptions followed the change made in Kanishka I's coinage of labelling the divine images in his Greek issue, but now the gods were named in Bactrian. Most of the names are of Iranian origin, but a few on the coins of Kanishka I and Huvishka are Bactrian transcriptions of Greek or Indian names (**Table A2.3**).

The grammatical case of the inscriptions is less clear as there were three endings used in the obverse inscriptions -ο, -ι and -ε. In Bactrian the -ο ending, formerly the direct case, in the Kushan period represented an absence of inflection and the -ι and -ε were different versions of the inflection for the oblique case. During the Kushan period there was a trend towards losing inflections and by the reign of Vasudeva I all nouns in coin inscriptions end with -ο, which appears to have been unpronounced (Sims-Williams 1989b, 234–5; Korn 2016, 420–2). In every case the titles and

Dynasty/ruler	Approximate dates	Reference		Square					Curved		
				Σ	Ω	Ο	Θ	Φ	Σ	Ω	Ε
				⊏	Ш	□	⊟	中	c	ω	є
Parthian											
Phraates III	70–57 BC	Sell 38–9		x							
Vonones	AD 8–12	Sell 60		x		x			x	x	x
Vardanes I	AD 40–5	Sell 64		x	x	x					
Indo-Greek											
Nicias	70 BC	Bop 6		x	x	x					
Theophilus	70 BC	Bop 2, 4					x				
Zoilus II	40–20 BC	Bop 2, 4–6			x					x	
Indo-Scythian											
Azilises	60 BC	Sen 58		x							
Spalahores	50 BC	Sen 69		x	x	x					
Azes I	45–10 BC	Sen 80–1		x							
		Sen 87–90				x					
Indo-Scythian successors											
Apracarajas	AD 30–90	Sen 175–85		x	x	x					
Kharahostes	AD 40–60	Sen 143		x	x	x					
Mujatria	AD 60–90	Sen 139–40, 145–7		x	x	x					
Zeionises	AD 30–50	Sen 130–4		x					x	x	
Rajuvula	AD 20–50	Sen 150							x	x	x
Indo-Parthian											
Gondophares	AD 32–60	Sen 210–22		x		x		x	x	x	x
Abdagases	AD 60–70	Sen 224–5		x	x	x			x	x	x
Sarpedanes	AD 60–70	Sen 253–5		x					x	x	x
Sasan	AD 60–90	Sen 243–4			x				x	x	x
Orthagnes	AD 70–90	Sen 256–7		x	x	x	x		x	x	x
Pakores	AD 90–120	Sen 269							x	x	x
Kushan											
Kujula Kadphises	AD 50–90	A.S2		x		x					
		A.C1		x							
		A.C2B		x		x		x			
		A.C4-i							x		
		A.C5							x		x
		A.7A-ii		x							
Wima Takto/Soter Megas	AD 90–113	B.C1-i		x	x	x					
		B.C1-ii			x				x	x	x
		B.C1-iii			x				x	x	x
		B.C2-ii							x	x	x
		B.S1							x	x	x
		B.C4		x	x						
Wima Kadphises	AD 113–27	C.G1-i, ii, iv, v							x		x
		C.G1-iii							x	x	x
		C.C1							x	x	x
Kanishka I	AD 127–51	D.G1-i							x	x	x
		D.C1-i							x	x	x

Sell = Sellwood 1980; Bop = Bopearachchi 1991; Sen = Senior 2001

Table A2.2 Introduction of square and cursive letter forms on coins in the use of Greek in Iran and the territory conquered by the Kushans

	Greek	Sanskrit	Bactrian
Heracles	Ἡρακλης		ΗΡΑΚΙΛΟ ΗΡΚΙΛΟ ΗΡΕΙΚΕΙΛΟ
Dionysus	Διονυσος		ΔΕΙΝΕΙΣΟ
Sarapis	Σεραπις		ΣΑΡΑΠΟ
Buddha		*buddha*	ΒΟΔΔΟ
Sakyamuni Buddha		*śākyamuni buddha*	ΣΑΚΑΜΑΝΟ ΒΟΥΔΟ
Maitreya Buddha		*maitreya buddha*	ΜΗΤΡΑΓΟ ΒΟΥΔΟ
Mahasena		*mahāsena*	ΜΑΑΣΗΝΟ
Skando-Kumaro		*skanda kumāra*	ΣΚΑΝΔΟ ΚΟΜΑΡΟ
Vishakha		*viśākha*	ΒΙΖΑΓΟ
Uma		*umā*	ΟΜΜΟ

Table A2.3 Divine names transcribed from Greek or Indian into Bactrian on the coins of Kanishka I and Huvishka

dynastic name had the -ο ending, but the king's name could end with -ι or -ο on the coins of Kanishka I and -ο, -ι or -ε on those of Huvishka, and after them it was always -ο. The genitive form of Kanishka's name in Greek and the oblique case in Bactrian suggest that the inscription was intended to be possessive as in the earlier Indo-Greek and Indo-Scythian series, but the effective loss of inflections after Huvishka makes it difficult to know if this intention continued. The mixture of uninflected and oblique case forms in Kanishka and Huvishka's Bactrian inscriptions seem to suggest that the use of nominative titles with a genitive name in Kanishka's Greek coin inscription was influenced by Bactrian usage, where only the significant word, i.e. the king's name, was inflected, rather than a simple indication of the poor Greek of the coin designer.

The names of gods all appear with final -ο, apart from the goddess Nana whose name has -α, i.e. they are also uninflected, so perhaps it can be inferred that, like the Greek inscriptions next to gods on Kanishka's first issue in the nominative case, the Bactrian names are labels. A few examples of misspelt versions of divine names occur, such as Oesho ending in -α (E.G.2-iv, reverse 5g) and Nana ending in -ο (E.G2-iii and -iv, reverse 4e).

The only words in Bactrian appearing on Kushan coins apart from royal names, titles and the names of gods are the as-yet unrecognised words on the reverse of Wima Takto's enthroned king type (B.C6): ΤΑΡΟ ΟΑΝΑΧΑΟ, and the epithet ΟΑΖΟ of the god Orlagno on one type of Kanishka I's gold coins (D.G1-iii, reverse 12c). ΟΑΖΟ seems to be related to the Bactrian word οηζο, meaning 'potent' (Sims-Williams pers. comm.), so could be an epithet identifying Orlagno as a powerful deity. On the reverse of one type of copper coin of Huvishka, the name and title of a high official also appears, labelling the image of that official kneeling before the goddess Nana (E.C2-iii, reverse 4i): ΟΜΟΙΑΓΟΓΑΝΟ ΚΑΡΑΛΡΑΓΓΟ (Omoiagogano the Karalrang).

The writing of Bactrian in Greek was unique among Iranian languages, but reflected the dominant role of Greek at the time of the switch to Bactrian. The alphabet adopted is that already current in Kushan territory, with the forms as used on the coins of the first Kushan kings. These curved forms of Greek script, as described above, became the basis for writing Bactrian on coins and in inscriptions. The first use of curved forms of sigma and epsilon in Bactrian were in Kujula Kadphises' Bactrian coin inscription (A.C5), where the cursive style was evident in the joining strokes of some of the letters. The square forms of sigma, omicron, epsilon and phi were also used in Kujula Kadphises' other Bactrian coin inscription (A.C2B-ii) and in the Dasht-e Nawar Bactrian inscription of Wima Takto (Sims-Williams and Cribb 1995–6, 95, 136) and continued to have some use after curved forms were used on Kanishka I's coins and in his Rabatak inscription, as the square sigma, omega, and omicron (but a curved epsilon) were used in the silver plate inscription of Kanishka I's 10th year (Sims-Williams 2015).

The forms of Bactrian letters used on Kushan coins were fairly stable with most of the letters retaining the same basic shape, inherited from early Kushan-period Greek, until Bactrian inscriptions ceased to function properly from the reign of Vasudeva II. The letters eta, kappa, nu and upsilon showed the greatest diversity of form. There was some convergence of the forms of alpha, delta, omicron and rho, but not to the extent observed in the use of Bactrian on Kushano-Sasanian and Kidarite coins. Both these trends were already present in the reign of Kanishka I, so they should not be seen as chronological developments, but as the diversity of hands creating the inscriptions. In a few cases the letters epsilon and iota were joined together into a single form, as in the name of Heracles (E.C2-iii, reverses 11d–i) and Dionysus (E.G1-v, reverse 10a) on the coins of Huvishka, a practice which later became more usual, as in the first syllable of the names of Kidara (Z.G1) and Pidoko (Z-B.G1) on Kidarite coins.

When Sasanian rulers took Bactria/Tokharistan and then areas south of the Hindu Kush from the Kushans in the 3rd century they continued the use of Bactrian inscriptions written in Greek script on many of their coins, but on many issues in Bactria they also used Middle Persian written in Pahlavi script. The same pattern of coin inscription was used by the Kidarite Huns when they took over Bactria from the Sasanians and also by the Sasanian king Peroz and the Hephthalites who succeeded them.

The Bactrian used by the Sasanian Kushanshahs on their coins was based on that used during the Kushan period, but with a gradual tendency towards more cursive

forms with ligatures, resembling the handwritten forms found in the Bactrian documents (Sims-Williams 2007; 2012a; 2012b). The convergence of alpha, delta, omicron and rho became more extreme and the inscriptions are often legible only because their content is already known from better-written examples. Inscriptions tended to be well written on gold coins, but often illegible on copper. The Kidarite issues which followed the Bactrian issues of the Sasanian Kushanshahs continued the same script styles, but with even more uncertainty of the correct forms of the converging letters. In the inscription of Kidara this is very evident particularly in the second part of his name and the following word, so ΚΙΔΑΡΟ ΟΟΖΟΡΚΟ was often written as ΚΙΟΟΟΟΟΟΖΟΡΚΟ, with varying numbers of the circular letters from four to ten. By the end of the Kidarite period the inscriptions were becoming barely legible, but Bactrian was still recognised as the appropriate language for coin inscriptions by Peroz, the Sasanian emperor who conquered them and issued coins at Balkh, and by the Hephthalites, who in tun took Bactria from him.

The Sasanian coin designers changed the content of the Kushan version of Bactrian coin inscriptions, adding words with Middle Persian cognates (see above), extending the royal titles to say ΒΑΓΟ *name* ΟΟΖΟΡΚΟ ΚΟϷΑΝΟ ϷΑ(Υ)Ο 'lord (name) great Kushan king' (in one case replacing ϷΑΥΟ with ϷΑΥΟΝΟ ϷΑΥΟ, king of kings). On the reverses they relabelled the Sasanian version of the Kushan gods using Middle Persian terms transliterated into Bactrian: Oesho was rendered as ΒΟΡΖΑΟΑΝΔΟ ΒΑΓΟ (high god) or ΒΟΡΖΑΟΑΝΔΟ ΙΑΖΑΔΟ (high yazata); Miiro as ΒΑΓΟ ΜΙΥΡΟ (R.G1, R.C2-i) or ΜΙΥΡΟ ΙΑΖΑΔΟ (R.C2-ii); Nana as ΒΑΓΑ ΝΑΝΑ (T.C1-i). The same type of inscriptions were used by the Kidarites on their Bactrian issues, but after Kidara the title ΟΟΖΟΡΚΟ was dropped and the reverse inscriptions disappeared. After the last Kidarite issues the title Kushanshah was no longer used and the last Hephthalite to issue Kushano-Sasanian style coins adopted the title ΜΙΙΡΟΣΑΝΟ ϷΑΟ 'king of the East' in its place.

The Hephthalites continued to use Bactrian on their issues south of the Hindu Kush, but gradually replaced it with Sanskrit written in Brahmi. The last use of Bactrian on coins was on the issues of the Turks in Afghanistan until the first issues of the Shahi rulers of Kabul in the 8th century (Cribb 2021).

In this volume Bactrian is transcribed using a standard Greek font, with the addition of the letter Ϸ. Where Bactrian is used in coin inscriptions it is transcribed as capitals, even when the forms on coins were cursive.

Gandhari (Kharoshthi script)

As the early Kushan kings took control of territory south of the Hindu Kush they began issuing coins following the local tradition, with Greek inscriptions on the obverse and Gandhari inscriptions on the reverse, following the pattern introduced by the Indo-Greek kings in the 2nd century BC and continued by their Indo-Scythian and Indo-Parthian successors. The Gandhari inscriptions were written using Kharoshthi script, which appears to have been invented in the 4th century BC specifically to write Gandhari. It has been shown that it was invented by scribes using Aramaic script as their inspiration, and like Aramaic it was written from right to left (Salomon 1998, 51–4). Unlike Aramaic, however, Kharoshthi has marked vowels, made by adding strokes to the base syllable which represents the consonant with a short -a. The script is first known from the Asokan edicts on rocks found at Shahbazgari and Mansehra in greater Gandhara, northern Pakistan. In the 1st–2nd century AD Kharoshthi was widely used in Buddhist inscriptions across northern Pakistan and central Afghanistan with some spillage into northern India, as the rulers of greater Gandhara took control of Mathura. The script therefore seems to have been used wherever Gandhari was the main language. Both script and language were also adopted in the city states of the southern Tarim Basin, in modern Xinjiang, where many documents and coins written in Gandhari were found in the early 20th century (Boyer *et al.* 1920–9; Cribb 1984b and 1985d). Several collections of Gandhari documents from the Buddhist communities of the Kushan period have also been discovered (Salomon 2018).

Gandhari inscriptions were only used on the coins of the first three Kushan kings. The inscriptions were positioned on the reverse of the coins. The coins of Indo-Greek and Indo-Scythian rulers used the Gandhari inscriptions as translations of their Greek coin inscriptions into the local language, but the Indo-Parthians who preceded the Kushans expanded them to include epithets and titles not appearing in the Greek, e.g. Gondophares copper coin (Senior 2001, type 215) inscribed ΒΑΣΙΛΕΩΣ ΒΑΣΙΛΕΩΝ ΜΕΓΑΛΟΥ ΓΟΝΔΟΦΕΡΟΥ on the obverse, has on its reverse *maharayasa* (*rayarayasa*) *mahatasa dramikasa apratihatasa devavratasa gudavharasa*, so adding the epithets *dramikasa* (just) *apratihatasa* (unconquered) and *devavratasa* (devoted to the gods). The early Kushans who were influenced by Indo-Parthian coin design also did not always treat the Gandhari inscription as a translation of the Greek on the obverse. In some cases they added Gandhari words which did not appear in the Greek, such as the titles *sarvaloga'iśvara, mahiśvara* (lord of the whole world, great lord) introduced on the coins of Wima Kadphises (Cribb 2014, 89–90). As well as new Gandhari terminology, the coins of Kujula Kadphises include non-Indian terms transliterated into Gandhari, such as his name, transcribed as *kujula kasa*, *kuyula kaüsa*, *kuyula kadapha*, *kuyula kadaphsa*, *kuyula katakapa* or *kuyula katakaphsa*, his dynastic name as *koṣana*, *oṣana*, *kuṣaṇa*, *khuṣaṇa*, or *khaṣana* and his title yabgu as *yavuga*, *yavua and ya'u'a*.

In keeping with their prototypes, early Kushan Gandhari inscriptions are in the possessive case, with the genitive inflection *-sa*, even when the Greek inscription on the obverse is in the nominative case. The presence of this inflection offers evidence of the structure of the names of the first three kings. Each of them has a two-part name, with shared uses of the parts by these kings, but in all coin inscriptions the first part of the name is never given this inflection, suggesting that the name is a compound rather than two separate names.

The style of writing Kharoshthi (Salomon 1998, 55–6) used on Kushan coins is very similar to that used by the Indo-Parthians and by some of the Indo-Scythian successor rulers, and is distinguishable from that used on Indo-Greek

and Indo-Scythian coins. There had been little change in the basic forms of Kharoshthi characters since the earliest Asokan-period script. The Indo-Greek and Indo-Scythian coin inscriptions tended to use squatter versions than those used on Indo-Parthian and early Kushan coins. The recently found Gandhari Buddhist documents and the Xinjiang documents show a further development with more cursive forms as would be expected from their handwritten context. The distinction between forms of the letter *sa* is often used as a guide to the chronology of Kharoshthi, but the forms on coins do not bear out the accepted view that Kushan-period *sa* has a fully open top, as the semi-closed version was still being used on the Kashmir coins of Huvishka (E.C3, obverse 4B).

On the Kashmir issues of Kujula Kadphises (A.C6) and Wima Takto (B.C5) there are Kharoshthi monograms of a type not found elsewhere. They take the form of vertical sets of characters joined into a single unit. Their form prefigures the vertical Brahmi monograms appearing on later Kushan coins. The use of Kharoshthi control marks, both monograms and single characters, on the coins of Kujula Kadphises and Wima Takto does not continue into the reign of Wima Kadphises, but re-emerges on the Kashmir coins of Kanishka I and Huvishka, and occasional examples continue to be used on the coins of Vasudeva I, Kanishka II and Vasishka. On some rare coins of Huvishka there is a Gandhari word *yodhavade* (E.C2-i and -ii) which appears to be the name of an official. A group of imitations of Huvishka (E-imit.C3-iv) copper coins also have unintelligible Kharoshthi inscriptions: *vhriagadi majhapasa*, *disadhami* and *rajaśi*. The disappearance of Kharoshthi control marks coincides roughly with the end of the use of Kharoshthi to write inscriptions in Gandhara, as the last inscription mentioning a Kushan king is the Ara inscription of Kanishka III (Skinner 189; CKI 158; see Ch. 3 §I.1). This coincides with the increasing use of Brahmi and Sanskrit on Kushan coins and in inscriptions (Strauch 2011, 157–8).

In this catalogue Gandhari inscriptions are transcribed in italics using the normal diacritics, as there is not a suitable font available. The table of Kharoshthi as used on Kushan coins is arranged in the same sequence as the Sanskrit alphabet. There was a standard alphabet for Kharoshthi called *arapacana*, but this is not used here as it is not helpful for finding the letter forms (Salomon 1990; Strauch 2011, 137–45).

Sanskrit and Epigraphic Hybrid Sanskrit (Brahmi script)

The introduction and growth of Brahmi control marks and monograms on Kushan, Kushano-Sasanian and Kidarite coins was an innovation which took Kushan coin design away from its Greek tradition antecedents. It seems to have drawn some inspiration from the use of Kharoshthi and Greek monograms and single character control marks used on Indo-Scythian, Indo-Parthian and early Kushan coins, but created its own new system from the reign of Vasudeva II. The Brahmi inscriptions are always short, usually simply names, and as such it is impossible to identify which language the mint would have employed if they were longer. In contemporary epigraphy Brahmi is primarily used to write something known as Epigraphic Hybrid Sanskrit, and occasionally for Sanskrit. Epigraphic Hybrid Sanskrit grew out of the infiltration of Sanskrit features into the local Middle Indian Prakrit used in the part of northern India under Kushan rule (Damsteegt 1978; Salomon 1998, 83–8). During the later Kushan period there was a tendency for Sanskrit to supersede Gandhari, as is evident in the Kharoshthi documents (Strauch 2011). The use of Kharoshthi to write Sanskrit became more usual in the later documents, but the practice can already be seen in the Sanskritised inscription on one series of Kujula Kadphises' coins from Begram (A.C2B-i).

The first Brahmi control marks on Vasudeva I's coins were used together with Greek and Kharoshthi marks, but by the reign of Vasudeva II only Brahmi was used. At this stage the first monogram representing the king's name was introduced, replacing Bactrian as the means of identifying the issuing authority. This coincided with the loss of the Kushan territory in Afghanistan, which meant that Bactrian began to lose its official role in the remaining Kushan realm. Brahmi control marks continued to be used, but the royal monogram was the dominant inscription. The royal monogram was not accompanied by Gandhari/Sanskrit titles, but stood alone on Kushan coins. When the Kidarites struck their own versions of Kushan dinars in Gandhara, they began to add other information in the form of Gandhari/Sanskrit monograms, on one including the royal title *ṣahi*, in others the name of the territory ruled, both Gandhara and the Kushan state. These Gandhari/Sanskrit inscriptions also appeared, written in Brahmi, on the Gandharan silver coins of the Kidarites. The inscriptions on Kushan and Kidarite coins do not show inflections, so are probably intended as the nominative case as labels for the rulers depicted. The naming of the deity on the reverse of these coins disappeared with the use of Bactrian.

Brahmi control marks, but no monograms, also featured on Kushano-Sasanian coins issued both north and south of the Hindu Kush, and in some cases these control marks were the king's initial syllable *pe*. When the Kidarites succeeded to control of Kushan-Sasanian territory north of the Hindu Kush, they occasionally used the initial syllable of Balkh in Brahmi *ba* as a control mark.

The letter forms used are typical of those used in inscriptions at Mathura during the Kushan period, with the gradual transformation of some syllables, such as *ṣa* and *ya*, into simplified forms derived from handwriting, but both the tripartite and cursive form of *ya* appearing simultaneously on coins of Shaka (L.G1-ii and L.G2-ii) in the monogram *sya* and the square and cursive versions of *ṣa* in his royal monogram. The tripartite/cursive use in *sya* seems to have been a deliberate anachronism to create two distinct control marks but the use in the name is probably a function of the individual hands of engravers.

In the catalogue the Brahmi monograms and control marks are transcribed in italics using the normal diacritics. In the tables of examples the Brahmi characters and monograms are arranged in the standard sequence of the Sanskrit alphabet.

Middle Persian (Pahlavi script)

The Sasanian conquest of Kushan territory brought the use of Middle Persian and Pahlavi script into Afghanistan and

as the first Sasanian Kushanshahs began to issue coins they used Middle Persian inscriptions on some of them. Their obverse inscriptions were based on Sasanian models, adapting formulae found on coins of the first Sasanian emperors Ardashir I (Alram and Gyselen 2003, 133–4) and Shapur I (*ibid*., 186–90), with the religious affiliation, name and imperial title of the emperor: *mzdysn bgy* name *MLKAn MLKA ʾryʾn* = the divine Mazdayasnian *name* king of kings of Iran. The Kushanshahs normally replaced the imperial title 'king of kings' with their own title 'kushanshah': *mzdysn bgy* name *kwšʾn MLKA*.

There were some elaborations of this formula. The first Kushanshah ruler Ardashir I adds his father's name to his own: *ʾrthštr y ʾrthštr* (Ardashir [son] of Ardashir), and adds to his Kushanshah title his other title: *mrwy MLKA* (Mervshah). From the third ruler Peroz I, an epithet was added to the royal title: *RBA* (great). The fourth ruler Hormizd I expanded his title to imperial level: *kwšʾn MLKAn MLKA* (Kushan king of kings). These inscriptions were often abbreviated, dropping the religious affiliation, and elements of the king's titles, particularly on copper coins, where the inscription was often contracted to: name *MLKA*.

Although these inscriptions were in a new language written with a new script, they fit into the traditions of the region, both the Sasanian imperial coinage inscriptions which continue the structure and arrangement of Greek inscriptions of the Parthian rulers who were overthrown by the Sasanians, and of the Kushan emperors whose territory was seized by the Sasanian Kushanshahs.

The issue of coins with Middle Persian/Pahlavi inscriptions by the Kushanshahs was almost completely restricted to the Balkh mint north of the Hindu Kush. The only Middle Persian inscriptions south of the Hindu Kush were on rare issues of Hormizd I (U.C2-i) and Shapur II (X. C2-i), which were immediately replaced by issues with Bactrian inscriptions. The use of Middle Persian in Bactria/Tokharistan on the copper coins the Kidarite Huns issued in the name of Varahran familiarised them with its use and it appears on some of their Gandharan silver coins (P.S1, P.S2, Q.S1 and S2-ii).

Pahlavi inscriptions also appear on the reverse of the Sasanian Kushanshahs' coins. As on Kushan coins and on Kushanshah issues inscribed in Bactrian, these reverse inscriptions are labels of the images. The images are either deities on their own or deities being worshipped by the issuing king. Two deities are featured, the modified Kushan Oesho who is labelled as the 'high' yazata: *bwrzʾwndy yzdty* and the Sasanian goddess 'lady' Anahita *ʾnʾhytʾ MROTA* (V.G1), with her name spelt in two other ways: *ʾnhty* (R.C1) and *ʾnʾhyt* (S.C1). On one coin type (S.C1) she is given an epithet *phrz y brzy*, which seems to entitle her as the 'lofty protection' lady Anahita (reading thanks to Enrico Morano pers. comm.).

The style of writing the Pahlavi script is very similar to that on early Sasanian coins, with a similar level of variation in form (Skjærvø 2003). Some inscriptions are clearly engraved on the dies by artisans who are very unfamiliar with the script, copying a version supplied to them. Most of the inscriptions are not difficult to read because of the precedent of the formula borrowed from Sasanian coins, but a few of the innovative terms have been read conjecturally.

In the catalogue Middle Persian inscriptions in Pahlavi are transcribed in italics. The usual conventions of transcribing Pahlavi are used, with capitals used for ideograms used in Middle Persian to write words surviving from Aramaic. The Kushano-Sasanian coins make use of a few of these ideograms, *MLKA* meaning 'king' in place of the Middle Persian *šʾh*, *RBA* meaning 'great' for *wzrg*, and MROTA meaning 'lady' for *bʾnw*.

Bibliography

Note that web references where given are correct as of July 2025.

Abbreviations

Buckland = see Buckland 1906.

CKD = (Corpus of Kharoshthi Documents) 'Documents' in S. Baums and A. Glass (ongoing), *Catalog of Gāndhārī Texts*, https://gandhari.org/catalog?section=documents.

CKI = (Corpus of Kharoshthi Inscriptions) 'Inscriptions' in S. Baums and A. Glass (ongoing), *Catalog of Gāndhārī Texts*, https://gandhari.org/catalog?section=inscriptions.

CSH = 'Copper (and early silver) coin hoards' in Bracey, R. (2013) 'Kushan Coin Finds' version 1, https://www.academia.edu/130283465/Kushan_Coin_Finds_Guide_to_Kushan_History_, consulted July 2025; formerly http://www.kushan.org/sources/coin/ copperhoards.htm

Manville = see Manville 2009.

Shrava = inscription numbers in Shrava 1993.

Skinner = inscription numbers in Skinner 2017, 244–364.

Wang = see Wang 2011.

Abdullaev, K. 2004. 'A hoard of Kushan copper coins from the Khalchayan area (Sekharakat village, Surkhandarya Region, Uzbekistan) – a preliminary report', *Numismatic Chronicle* 164, 272–9.

Adrych, P., Bracey, R., Dalglish, D., Lenk, S., Wood, R. and Elsner J. 2017. *Images of Mithra*, Oxford.

Agrawal, A. 2014. 'Inscriptions c. 200 BC–AD 750', in Chakrabarti and Makkhan Lal 2014, 324–47.

Ahmed, M. and Al Hasan, M.A. 2014. 'Kushana coins from Bangladesh: a preliminary study', *Journal of Bengal Art* 19, 113–22.

Alcock, A. undated, *Bardaisan Book of the Laws of Countries*, https://www.academia.edu/35795355/Bardaisan _Book_of_the_Laws_of_Countries.

Ali, I. (ed.), Zahir, M., Raza, A., Khan Khali, S. and ur Rahman, M. 2004. *Catalogue of Coins, No. 1: Kushan Period* (*Frontier Archaeology* vol. 2), Peshawar.

Allan, J. 1914. *A Catalogue of the Indian Coins in the British Museum: Coins of the Gupta Dynasties and of Śaśāṅka, King of Gauḍa*, London.

Allan, J. 1929. 'Indian coins: Van den Bergh gift', *The British Museum Quarterly* 4(2), 36–7.

Allan, J. 1936. *A Catalogue of the Indian Coins in the British Museum: Coins of Ancient India*, London.

Allan, J., Haig, T.W. and Dodwell, H.H. 1934. *Cambridge Shorter History of India*, Cambridge.

Allon, M. 2019. 'A unique Gāndhārī monastic ledger recording gifts by Vima Kadphises (Studies in Gāndhārī Manuscripts 2)', *Journal of the International Association of Buddhist Studies* 42, 1–46.

Alram, M. 2007. 'Ardashir's eastern campaign and the numismatic evidence', in Cribb and Herrmann 2007, 227–42.

Alram, M. 2008. 'Ein Schatzfund Hephthalitischer Drachmen aus Baktrien', *Numismatische Zeitschrift* 116–17, 253–68.

Alram, M. 2015. 'The Cultural Impact of Sasanian Persia along the Silk Road – Aspects of Continuity', *e-Sasanika* 14, 1–26, https://www.scribd.com/document/345501705/The-Cultural-Impact-of-Sasanian-Persia-along-the-Silk-Road-Aspects-of-Continuity.

Alram, M. 2016. *Das Antlitz des Fremen – die Münzprägung der Hunnen und Westtürken in Zentralasien und Indien*, Vienna.

Alram, M. and Gyselen, R. 2003. *Sylloge Nummorum Sasanidarum: Paris – Berlin – Wien, Ardashir I. – Shapur I.*, vol. 1, Vienna.

Alram, M. and Gyselen, R. 2012. *Sylloge nummorum Sasanidarum: Paris – Berlin – Wien. Ohrmazd I. – Ohrmazd II.*, vol. 2, Vienna.

Alram, M. and Klimburg-Salter, D. (eds) 1999. *Coins, Art and Chronology, I: Essays on the Pre-Islamic History of the Indo-Iranian Borderlands*, Vienna.

Alram, M., Klimburg-Salter, D., Inaba, M. and Pfisterer, M. (eds) 2010. *Coins, Art and Chronology*, II: *The First Millennium C.E. in the Indo-Iranian Borderlands*, Vienna.

Altekar, A.S. 1955. *State and Government in Ancient India*, New Delhi.

Altekar, A.S. 1957. *The Coinage of the Gupta Empire and its Imitations*, Varanasi.

Anacker, S. 1975. 'Kaniṣka', in C.S. Prebish (ed.), *Buddhism: A Modern Perspective*, Pennsylvania, 46–8.

Andrew, W.P. 1856. *The Scinde Railway and its Relations to the Euphrates Valley, and Other Routes to India, with Illustrative Maps, Statistical Tables, &c., from Official Sources*, London.

Angal, D. G., Bhadane R. P. and Rajurkar N. S. 1993. 'Non-destructive analysis of ancient coins from different eras using Cf-252 neutron source' in T. Hackens, G. Moucharte, C. Courtois, H. Dewit, V. van Diressche (eds), *Proceedings of the XIth International Numismatic Congress* vol. 3, 221–6.

Appadurai, A. 1986. 'Introduction', in A. Appadurai (ed.), *The Social Life of Things*, Cambridge, 3–63.

Azarpay, G. 1981. *Sogdian Painting: The Pictorial Epic in Oriental Art*, Berkeley.

Bachhofer, L. 1929. *Early Indian Sculpture*, Paris.

Bailey, H.W. 1937. 'Ttaugara', *Bulletin of the School of Oriental Studies* 8(4), 883–921.

Bailey, H.W. 1980. 'A Kharoṣṭī inscription of Seṇavarma, king of Oḍi', *Journal of the Royal Asiatic Society*, 21–9.

Bailey, H.W. 1982. 'The dating in the Kamra Kharosthi Inscription', *Afghan Studies* 3–4, 79.

Bakker, H. 2017. *Monuments of Hope, Gloom, and Glory, in the Age of the Hunnic Wars. 50 years that changed India (484–534)*, Amsterdam.

Bakker, H. 2020a. *The Alkhan – a Hunnic People in South Asia*, Groningen.

Bakker, H. 2020b. 'Indic Sources X.2 Epigraphic Sources', in D. Balogh (ed.) *Hunnic Peoples in Central and South Asia – Sources for their Origin and History*, Groningen, 316–62.

Ball, W. 2016. *Rome in the East: The Transformation of an Empire*, revised edition, Abingdon.

Ball, W., Bordeaux, O., MacDowall, D.W., Sims-Williams, N. and Taddei, M. 2019. 'From the Kushans to the Shahis', in W. Ball, N. Hammond and R. Allchin (eds), *The Archaeology of Afghanistan: From Earliest Times to the Timurid Period*, second edition, Edinburgh, 344–459.

Balogh, D. and Somogyi, E. (trans.) 2009. *Málavika and Agnimitra by Kalidasa*, New York.

Banchich, T.M. (trans.) 2018. *Epitome De Caesaribus. A Booklet about the Style of Life and the Manners of the Imperatores*, (Canisius College Translated Texts No. 1), third edition, Buffalo, New York.

Banerjea, J.N. 1956. *The Development of Hindu Iconography*, Calcutta.

Banerji, D. 1921–2. 'The Andhau inscriptions of the time of Rudradaman', *Epigraphia Indica* 16, 19–25.

Banerji, A. 1951. 'The eastward expansion of the Kuṣāṇa Empire', *Indian Historical Quarterly* 18, 294–303.

Barua, B.M. 1929. *Old Brahmi Inscriptions in the Udayagiri and Khandagiri Caves*, Calcutta.

Basham, A.L. (ed.) 1968. *Papers on the Date of Kaniṣka*, Leiden.

Basu, S.P. 1977. *The Second Supplementary Catalogue of Coins*, vol. 1, Calcutta.

Basu Majumdar, S. 2009–10. 'Re-evaluating the Kuninda coins in the British Museum', *Proceedings of the Indian History Congress* 70, 1049–61.

Basu Majumdar, S. and Ahamad, R. 2010. 'Kushana copper coin hoard from Paniparul (West Bengal)', *PratnaSamiksha* 1, Kolkata, 149–53.

Bataille, G. 1928. 'Notes sur la numismatique des Koushans et des Koushan-Shahs Sassanides', *Arethuse* 5(1), 19–35.

Baums, S. 2012. 'Catalog and revised texts and translations of Gandharan reliquary inscriptions', in D. Jongeward, E. Errington, R. Salomon and S. Baums, *Gandharan Buddhist Reliquaries*, Seattle, 200–51.

Baums, S. 2018. 'A framework for Gandhāran chronology based on relic inscriptions', in P. Stewart and W. Rienjang (eds), *Problems of Chronology in Gandharan Art, Oxford*, 53–70.

Beckwith, C. 2009. *Empires of the Silk Road: A History of Central Eurasia from the Bronze Age to the Present*, Princeton.

Bedrosian, R. (trans.) 1985. *P'awstos Buzand's History of the Armenians – Translated from Classical Armenian*, http://www.attalus.org/armenian/pbtoc.html.

Beech, G.T. 2009. 'How England got its name (1014–1030)', *Nouvelle revue d'onomastique* 51, 17–52.

Bendall, S. 2002. 'A neglected nineteenth century numismatist', *The Numismatic Circular* 110(5), 261–4.

Benjamin, C. 2007. *The Yuezhi: Origins, Migration and the Conquest of Northern Bactria*, Turnhout.

Benjamin, C. 2018. *Empires of Ancient Eurasia: The First Silk Road Era, 100 BCE–250 CE*, Cambridge.

Benveniste, E. 1961. 'Inscriptions de Bactriane', *Journal Asiatique* 249, 114–52.

Bernard, P. 1980. 'Une nouvelle contribution soviétique a l'histoire des Kushans: la fouille de Dal'verzin-tépé (Uzbekistan)', *Bulletin de l'École française d'Extrême-Orient* 68, 318–48.

Bernstein, B. 1999. 'Vertical and horizontal discourse: an essay', *British Journal of Sociology of Education* 20(2), 157–73.

Bhandare, S. 2015. 'Space for change – evaluating the "paucity of metallic currency" in medieval India', in H.P. Ray (ed.), *Negotiating Cultural Identity: Landscapes in Early Medieval South Asian History*, New Delhi, 159–202.

Bhandare, S. and Garg, S. (eds) 2011. *Felicitas. Essays in Numismatics, Epigraphy and History in Honour of Joe Cribb*, Mumbai.

Bhandarkar, R.G. 1892. 'A peep into the early history of India', *Journal of the Bombay Branch of the Royal Asiatic Society* 20, 356–408.

Bhandarkar, D.R. and Chhabra, B.C. 1981. *Corpus Inscriptionum Indicarum: Inscriptions of the early Gupta Kings*, Calcutta (revised edition of Fleet 1888).

Bhat, C.K., Singh, B.R. and Bhat, C.L. 1994. 'Energy-dispersive X-ray fluorescence analysis of Kushan period coins', *Current Science* 66(4), 303–6.

Bhattacharya, S. 2009. 'A brief survey of colonial historiography in India', in B. Ray (ed.), *Different Types of History, History of Science, Philosophy and Culture in Indian Civilization*, vol. 14(4), 71–86.

Bindyabod, B.B. 1923. *Supplementary Catalogue of Coins in the Indian Museum*, vol. 1, *Non-Muhammadan Series*, Calcutta.

Biswas, A. 1973. *The Political History of the Hūṇas in India*, New Delhi.

Bivar, A.D.H. 1955. 'Notes on Kushan cursive seal inscriptions', *Numismatic Chronicle*, sixth series, 15, 203–10.

Bivar, A.D.H. 1956. 'The Kushano-Sasanian coin series', *Journal of the Numismatic Society of India* 18, 13–42.

Bivar, A.D.H. 1963. 'The Kaniṣka dating from Surkh Kotal', *Bulletin of the School of Oriental and African Studies* 26(3), 498–502.

Bivar, A.D.H. 1968. *Kushan and Kushano-Sasanian Seals and Kushano-Sasanian Coins: Sasanian Seals in the British Museum*, London.

Bivar, A.D.H. 1972. 'Cavalry equipment and tactics on the Euphrates frontier', *Dumbarton Oaks Papers* 26, 271–91.

Bivar, A.D.H. 1979. 'The absolute chronology of the Kushano-Sasanian Governors in Central Asia', in J. Harmatta (ed.), *Prolegomena to the Sources on the History of Pre-Islamic Central Asia*, Budapest, 317–32.

Bivar, A.D.H. 1983. 'The history of eastern Iran', in E. Yarshater (ed.), *The Cambridge History of Iran*, vol. 3(1), *The Seleucid, Parthian and Sasanian Periods*, Cambridge, 181–231.

Bivar, A.D.H. 1991. 'The historical origins of the art of Gandhāra', *Pakistan Archaeology* 26, 61–72.

Bivar, A.D.H and Bridge, M.C. 1989. 'Tree rings for Kanishka', *South Asian Studies* 5(1), 149–56.

Blet-Lemarquand, M. 2003. 'Analyse élémentaire de monnaies d'or kouchanes', in O. Bopearachchi, C. Landes and C. Sachs (eds), *De l'Indus à l'Oxus. Archéologie de l'Asie Centrale, Catalogue de l'Exposition du Musée de Lattes*, Lattes, 175–7.

Blet-Lemarquand, M. 2006. 'Analysis of Kushana gold coins: debasement and provenance study', in F. De Romanis and S. Sorda (eds), *Dal denarius al dinar: l'orient e la moneta romana* (*Studie e Materiali* 12), Rome, 155–71.

Blet-Lemarquand, M. and Ponting, M.J. 2009. 'Scientific and technical applications', in M. Amandry and D. Bateson (eds), *A Survey of Numismatic Research 2002–2007*, Glasgow, 714–19.

Blet-Lemarquand, M. and Sachs, C. 2002. 'À propos d'une pièce d'or de Huvishka au Cabinet des Médailles', *Bulletin de la Société Française de Numismatique* 57(5), 76–9.

Blockley, R.C. 1981. *The Fragmentary Classicising Historians of the Later Roman Empire: Eunapius, Olympiodorus, Priscus and Malchus*, vol. 1, Liverpool.

Blockley, R.C. 1983. *The Fragmentary Classicising Historians of the Later Roman Empire – Eunapius, Olympiodorus, Priscus and Malchus*, vol. 2, *Texts, Translation and Historiographical Notes*, Liverpool.

Blockley, R.C. 1987. 'The division of Armenia between the Romans and the Persians at the end of the fourth century A.D.', *Historia: Zeitschrift für Alte Geschichte* 36(2), 222–34.

Bopearachchi, O. 1991. *Monnaies gréco-bactriennes et indo-grecques: Catalogue raisonné*, Paris.

Bopearachchi, O. 2008. 'Les premiers souverains Kouchans: chronologie at iconographie monétaire', *Journal des Savants* 2008(1), 3–56.

Bopearachchi, O. and Pieper, W. 1998. *Ancient Indian Coins*, Turnhout.

Bose, S.K. and Nasir, N. 2016. *Early Coinage of Bengal (c.2nd Century BC–10th Century AD)*, Kolkata.

Bosworth, C.E. (trans.) 1999. *The History of al-Ṭabarī*, vol. 5, *The Sasanids, the Byzantines, the Lakhmids, and Yemen*, New York.

Boyce, M. and Grenet, F. 2015. *A History of Zoroastrianism*, vol. 3, *Zoroastrianism under Macedonian and Roman Rule*, Leiden.

Boyer, A.-M., Rapson, E.J., Senart, E. and Noble, P.S. 1920–9. *Kharoṣṭhī Inscriptions Discovered by Sir Aurel Stein in Chinese Turkestan*, Oxford.

Bracey, R. 2005. 'A note on the "Saeculum" and the Kushan Era', in *A Very Rough Guide to Kushan History*, https://www.scribd.com/document/249382721/A-Note-on-the-Saeculum-and-the-Kushan-Era.

Bracey, R. 2009. 'The coinage of Wima Kadphises', *Gandharan Studies* 3, 25–74.

Bracey, R. 2011a. 'Kankali Tila and Kushan chronology', in S. Bhandare and S. Garg (eds), *Felicitas: Essays in Numismatics, Epigraphy and History in Honour of Joe Cribb*, Mumbai, 65–79.

Bracey, R. 2011b. 'New histories of Central and South Asia: the role of numismatics', in Cook 2011, 44–52.

Bracey, R. 2011c. 'Review of F. Holt and O. Bopearachchi *The Alexander Medallion*', *Numismatic Chronicle* 171, 487–94.

Bracey, R. 2012a. 'The mint cities of the Kushan Empire', in F.L. Sánches (ed.), *The City and the Coin in the Ancient and Early Medieval Worlds*, Oxford, 117–29.

Bracey, R. 2012b. 'Policy, patronage, and the shrinking pantheon of the Kushans', in Jayaswal 2012, 197–218.

Bracey, R. 2017. 'The date of Kanishka since 1960', *Indian Historical Review* 44, 121–61.

Bracey, R. 2018. 'Is it appropriate to ask a celestial lady's age', in P. Stewart and W. Rienjang (eds), *Problems of Chronology in Gandharan Art*, Oxford, 135–47.

Bracey, R. 2019. *Playing with Money*, London.

Bracey, R. 2020. 'The limits of Kushan power and the limits of evidence', in R.E. Payne and R. King (eds), *The Limits of Empire in Ancient Afghanistan*, Wiesbaden, 113–55.

Bracey, R. and Oddy, W.A. 2010. 'The analysis of Kushan period gold coins by specific gravity', *Gandharan Studies* 4, 31–9.

Brentjes, B. 1989, 'Incised bones and a ceremonial belt, finds from Kurgan Tepe and Tillya Tepe', *Bulletin of the Asia Institute* 3, 39–44.

Brill, M. 1997. 'Analysis of carat gold', *Gold Technology* 22, 10–25.

Brown, R.L. 2000. 'The walking Tillya Tepe Buddha: a lost prototype', *Bulletin of the Asia Institute* 14, 77–87.

Brunner, C.J. 1974. 'The chronology of the Sasanian Kušānšāhs', *Museum Notes* 19, 145–64.

Buckland, C.E. 1906. *Dictionary of Indian Biography*, London.

Burnes, A. 1834. *Travels into Bokhara – Being the Account of a Journey from India to Cabool, Tartary, and Persia – Also, Narrative of a Voyage on the Indus, from the Sea to Lahore, with Presents from the King of Great Britain; Performed under the Orders of the Supreme Government of India, in the Years 1831, 1832, and 1833*, London, 3 volumes.

Burnett, A. 1983. 'Review *Antike Numismatik* by M.R. Alföldi; *Antike Numismatik* by R. Göbl', *The Journal of Roman Studies* 73, 218.

Burnett, A. 2011a. 'The British Museum and numismatics past and present', in Cook 2011, 2–11.

Burnett, A. 2011b. 'The Augustan revolution seen from the mints of the provinces', *The Journal of Roman Studies* 101, 1–30.

Burslem, R. 1846. *A Peep into Toorkisthan*, London.

Bussagli, M. 1968. 'The problem of Kaniṣka as seen by the art historian', in Basham 1968, 39–56.

Buswell, R.E. 2004. *Encyclopedia of Buddhism*, New York.

Butcher, K. 2015. 'Debasement and the decline of Rome', in R. Bland and D. Calomino (eds), *Studies in Ancient Coinage in Honour of Andrew Burnett*, London, 181–205.

Cabral, J.M.P., Marques, M.G., Araújo M.F. and Marinho, J.R. 1998. 'Application of XRF spectrometry to the study of Visigothic coinage', in W.A. Oddy and M. Cowell (eds), *Metallurgy in Numismatics* 4, London, 472–82.

Carolla, P. 2008. *Priscus Panita Excerpta*, Berlin.

Carson, R.A.G. 1966. 'The Sir Allen George Clark bequest', *The British Museum Quarterly* 31(1/2), 32–4.

Carter, M. 1985. 'A numismatic reconstruction of Kushano-Sasanian history', *Museum Notes* 30, 213–81.

Casson, L. 1986. 'P. Vindob G 40822 and the shipping of goods from India', *The Bulletin of the American Society of Papyrologists* 23(3/4), 73–9.

Casson, L. 1989. *Periplus Maris Erythraei: Text, Translation and Commentary*, Princeton.

Caygill, M. and Cherry, J. 1997. *A.W. Franks: Nineteenth-Century Collecting and the British Museum*, London.

Chakrabarti, D.K. 1988. *A History of Indian Archaeology from the Beginning to 1947*, New Delhi.

Chakrabarti, D.K. 2003. *Archaeology in the Third World: A History of Indian Archaeology since 1947*, Delhi.

Chakrabarti, D.K. and Makkhan Lal (eds) 2014. *History of Ancient India*, vol. 4, *Political History and Administration (c. 200 BC – AD 750)*, New Delhi.

Chakravarti, R. 2014. 'The Kushanas', in Chakrabarti and Makkhan Lal 2014, 35–68.

Chakravarti, R. 2019. 'The Roman Empire, Berenike, Socotra and the Indian seaboards: maritime interlocking (*c.* late first century BCE – 300 CE)', in N. Dayal and K. Roy (eds), *Questioning Paradigms Constructing Histories: A Festschrift for Romila Thapar*, New Delhi, 346–61.

Challis, C.E. (ed.) 1992. *A New History of the Royal Mint*, Cambridge.

Chattopadhyay, B. 1967. *The Age of the Kushāṇas: A Numismatic Study*, Calcutta.

Chattopadhyaya, B. 1977. *Coins and Currency Systems in South India c. AD 225–1300*, New Delhi.

Chattopadhyaya, D. (ed.), Lama Chimpa and Chattopadhyaya, A. (trans.) 1970. *Taranatha's History of Buddhism in India*, Delhi.

Chaumont, M.L. 2011 [1986]. 'Armenia and Iran ii. The pre-Islamic period', *Encyclopædia Iranica*, online edition, http://www.iranicaonline.org/articles/armenia-ii.

Cho, S. 2002. 'The rationalist tendency in modern Buddhist scholarship: a revaluation', *Philosophy East and West* 52(4) (Oct. 2002), 426–40.

Choksy, J.K. 2012. 'X̀iiaona-or Hun reconsidered', *Acta Orientalia Academiae Scientiarum Hungaricae* 65(1), 93–8.

Codrington, O. 1911. 'Coins collected by Sir A. Henry McMahon, K.C.I.E., in Seistan', *Journal of the Royal Asiatic Society*, 779–84.

Cohoon, J.W. and Lamar Crosby, H. 1940 *Dio Chrysostom*, vol. 3, London.

Collingwood, R.G. 1946. *The Ideas of History*, Oxford.

Cook, B. (ed.) 2011. *The British Museum and the Future of UK Numismatics*, London

Coomaraswamy, A.K. 1927. 'The origin of the Buddha image', *The Art Bulletin* 9(4), 287–329.

Cribb, J. 1981a. 'Gandharan hoards of Kushano–Sasanian and Late Kushan coppers', *Coin Hoards* 6, 93–108.

Cribb, J. 1981b. 'Und (Ohind), Pakistan, hoard no. 304', *Coin Hoards* 6, 89–92.

Cribb, J. 1984a. 'The origin of the Buddha image – the numismatic evidence', in B. Allchin (ed.), *South Asian Archaeology 1981, Proceedings of the Sixth Conference of South Asian Archaeologists in Western Europe*, Cambridge, 231–44.

Cribb, J. 1984b. 'The Sino-Kharosthi coins of Khotan: their attribution and relevance to Kushan chronology', part 1, *Numismatic Chronicle* 144, 128–52.

Cribb, J. 1985a. 'A re-examination of the Buddha images on the coins of king Kanishka: new light on the origins of the Buddha image in Gandharan art', in A.K. Narain (ed.), *Studies in Buddhist Art of South Asia*, New Delhi, 59–87.

Cribb, J. 1985b. 'Imitations of Kushan copper coins', *Coin Hoards* 7, 301–5.

Cribb, J. 1985c. 'Some further hoards of Kushano-Sasanian and late Kushan coppers', *Coin Hoards* 7, 308–21.

Cribb, J. 1985d. 'The Sino-Kharosthi coins of Khotan: their attribution and relevance to Kushan chronology', part 2, *Numismatic Chronicle* 145, 136–49.

Cribb, J. 1985e 'New evidence of Indo-Parthian political history', *Coin Hoards* 7, 282–300.

Cribb, J. 1985f. 'The late Kushan type of gold coins of Mashra', *Coin Hoards* 7, 306–7.

Cribb, J. 1986. *Money, from Cowrie Shells to Credit Cards*, London.

Cribb, J. 1990. 'Numismatic evidence for Kushano-Sasanian chronology', in *Studia Iranica* 1990, 151–93, pls I–VIII.

Cribb, J. 1992. *A Catalogue of Sycee in the British Museum: Chinese Silver Currency Ingots, c.1750–1933*, London.

Cribb, J. 1993. 'The "Heraus" coins: their attribution to the Kushan king Kujula Kadphises, c. AD 30–80', in M. Price, A. Burnett and R. Bland (eds), *Essays in Honour of Robert Carson and Kenneth Jenkins*, London, 107–34.

Cribb, J. 1997a. 'Shiva Images on Kushan and Kushano-Sasanian coins', in K. Tanabe, J. Cribb and H. Wang (eds), *Studies in Silk Road Coins and Culture: Papers in Honour of Professor Ikuo Hirayama on his 65th Birthday*, Kamakura, 1–66.

Cribb, J. 1997b. 'India and South East Asia', in J. Williams, J. Cribb and E. Errington (eds), *Money: A History*, London, 108–34.

Cribb, J. 1998a. 'Western Satraps and Satavahanas: old and new ideas of chronology', in A.K. Jha and S. Garg (eds), *Ex Moneta, Essays on Numismatics, History and Archaeology in Honour of D.W. MacDowall*, vol. 1, Nashik, 167–82.

Cribb, J. 1998b. 'The end of Greek coinage in Bactria and India and its evidence for the Kushan coinage system', in R. Ashton and S. Hurter (eds), *Studies in Greek Numismatics in Memory of Martin Jessop Price*, London, 83–98, pls 21–3.

Cribb, J. 1999a. 'The early Kushan kings: new evidence for chronology: evidence from the Rabatak inscription of Kanishka I', in Alram and Klimburg-Salter 1999, 177–205.

Cribb, J. 1999b. *Magic Coins of Java, Bali and the Malay Peninsula, 13th to 20th Centuries: A Catalogue Based on the Raffles Collection of Coin-shaped Charms from Java in the British Museum*, London.

Cribb, J. 1999–2000. Kanishka I's Buddha image coins revisited, *Silk Road Art and Archaeology* 6, 151–89.

Cribb. J. 2002. 'The coins from Akra', *Ancient Pakistan* 15, 65–84.

Cribb, J. 2003. 'The origins of the Indian coinage tradition', in *South Asian Studies* 19, 1–19 (reprinted 2015 as J. Cribb *The Indian Coinage Tradition: Origins, Continuity and Change*, Nashik, 5–40).

Cribb, J. 2005a. 'The Greek kingdom of Bactria, its coinage and its collapse', in O. Bopearachchi and M.-F. Boussac (eds), *Afghanistan: ancien carrefour entre l'Est et l'Ouest*, Turnhout, 207–26.

Cribb, J. 2005b. 'Money as metaphor 1', *The Numismatic Chronicle* 165, 417–38.

Cribb, J. 2006. 'Money as metaphor 2', *The Numismatic Chronicle* 166, 493–517.

Cribb, J. 2007a. 'Rediscovering the Kushans', in Errington and Curtis 2007, 179–210 (reprinted in Jayaswal 2012, 3–56).

Cribb, J. 2007b. 'Money as a marker of cultural continuity and change in Central Asia', in J. Cribb and G. Herrmann (eds), *After Alexander: Central Asia before Islam*, London, 333–75.

Cribb, J. 2007c. 'Money as metaphor 3', *The Numismatic Chronicle* 167, 361–95.

Cribb, J. 2008. 'The Kushan pantheon', in C. Luczanits (ed.), *Gandhara: The Buddhist Heritage of Pakistan: Legends, Monasteries and Paradise*, Mainz, 122–5, 145–53.

Cribb, J. 2009. 'Money as Metaphor 4', *Numismatic Chronicle* 169, 461–529, pls 50–6.

Cribb, J. 2010. 'The Kidarites, the numismatic evidence', in Alram *et al.* 2010, 91–146.
Cribb, J. 2014. 'The Soter Megas coinage of the first and second Kushan kings, Kujula Kadphises and Wima Takto', *Gandharan Studies* 8, 77–133.
Cribb, J. 2015. 'Dating and locating Mujatria and the two Kharahostes', *Journal of the Oriental Numismatic Society* 223, 26–48.
Cribb, J. 2016a. 'Dating the Bimaran casket – its conflicted role in the chronology of Gandharan art', *Gandharan Studies* 10, 57–91.
Cribb, J. 2016b. 'Early medieval Kashmir coinage – a new hoard and an anomaly', *Numismatic Digest* 40, 86–112.
Cribb, J. 2018a. 'Numismatic evidence and the date of Kaniṣka I', in P. Stewart and W. Rienjang (eds), *Problems of Chronology in Gandharan Art*, Oxford, 7–34.
Cribb, J. 2018b. *Kujula Kadphises and his Title Kushan Yavuga* (*Sino-Platonic Papers* 280), Philadelphia.
Cribb, J. 2018c. 'The Bimaran casket: the problem of its date and significance', in J. Stargardt and M. Willis (eds), *Relics and Relic Worship in Early Buddhism: India, Afghanistan, Sri Lanka and Burma*, London, 47–65.
Cribb, J. 2020. 'Greekness after the end of the Bactrian and Indo-Greek kingdoms', in R. Mairs (ed.), *The Graeco-Bactrian and Indo-Greek Worlds*, London, 653–81.
Cribb, J. 2021. 'The monetary history of Begram', in Errington 2021a, 81–126.
Cribb, J. 2023a. 'The Sino-Kharoṣṭhī coins of Khotan and their significance for this kingdom's interregional connections', *Journal of the Economic and Social History of the Orient* 66, 318–93.
Cribb, J. 2023b. 'The heritage of Kushan designs on early Gupta and other South and Central Asian coins' in J. Lingen, J. van Heesch, P. Pasmans, J. Cribb and J. Moens (eds), *Festschrift in Honour of Dr Ellen Raven (Numismatic Studies No. 5 of the Numismatic Society of Diest)*, Diest, 59–76.
Cribb, J. 2024. 'A Kushan royal inscription among the Almosi rock inscriptions recently discovered in Tajikistan', *Journal of the Royal Asiatic Society* 3rd series, vol. 34.2, 361–75.
Cribb, J. and Herrmann, G. (eds) 2007. *After Alexander: Central Asia before Islam*, Oxford.
Cribb, J., Khan, F. and Amanullah. 2012. 'Late Kushan copper hoard (?) from the collection of S.R.O. in Directorate of Archaeology and Museums Khyber Pakhtunkhwa', *Ancient Pakistan* 23, 117–43.
Cribb. J., Loeschner, H., Traum, R. and Vondrovec, K. 2022. 'A not so "unfortunate" Kushano-Sasanian coin', *Journal of the Oriental Numismatic Society* 249: 4–7.
Cribb, J. and Potts, D. 1996. 'Chinese coin finds from Arabia and Arabian Gulf', *Arabian Archaeology and Epigraphy* 7, 108–18.
Cribb, J. and Singh, K. 2017. 'Two curious "Kidarite" coin types from 5th century Kashmir', *Journal of the Oriental Numismatic Society* 230, 7–12
Croke, B. 1983. 'The context and date of Priscus Fragment 6', *Classical Philology* 78(4), 297–308.
Cunningham, A. 1845. 'Notice of some unpublished coins of the Indo-Scythians', *Journal of the Asiatic Society of Bengal* 14, 430–41.
Cunningham, A. 1854 'Coins of Indian Buddhist satraps with Greek inscription', *Journal of the Asiatic Society of Bengal* 23, 679–714.
Cunningham, A. 1862. 'Literary intelligence', *Journal of the Asiatic Society of Bengal* 31, 425.
Cunningham, A. (1868, 1869, 1870, 1872 and 1873) 'Coins of Alexander's Successors in the East', *Numismatic Chronicle*, new series, 8 (1868), pp. 93–136, 181–213, 257–83; 9 (1869), pp. 28–46, 121–53, 217–46, 293–318; 10 (1870), pp. 65–90, 205–36; 12 (1872), pp. 157–85; 13 (1873), pp. 187–219.
Cunningham, A. 1884. Reprint of Cunningham 1868, 1869, 1870, 1872 and 1873.
Cunningham, A. 1888. 'Coins of the Indo-Scythian king Miaüs, or Heraüs', *Numismatic Chronicl*e, third series, 8, 47–58.
Cunningham, A. 1889. Coins of the Tochari, Kushâns, or Yue-Ti', *Numismatic Chronicle*, third series, 9, 268–311.
Cunningham, A. 1892. 'Coins of the Kushâns, or Great Yue-Ti', *Numismatic Chronicle*, third series, 12, 40–82, 98–159.
Cunningham, A. 1893a. 'The Later Indo-Scythians', *Numismatic Chronicle*, third series, 13, 93–128.
Cunningham, A. 1893b. 'The Later Indo-Scythians: Little Kushans', *Numismatic Chronicle*, third series, 13, 184–202.
Cunningham, A. 1894. *Coins of Mediæval India from the Seventh Century down to the Muhammadan Conquests*, London.
Curiel, R. 1953. 'Le trésor du Tépé Maranǰān, une trouvaille de monnaies sasanides et kušano-sasanides faite près de Caboul', in R. Curiel and D. Schlumberger (eds), *Trésors monétaires d'Afghanistan*, Paris, 101–30.
Curiel, R. 1954. 'Inscriptions de Surkh Kotal', *Journal Asiatique* 242, 189–205.
Curtis, V.S. 1998. 'The Parthian costume and headdress', in J. Wieshofer (ed.), *Das Partherreich und seine Zeunisse: The Arsacid Empire: Sources and Documentation*, Stuttgart, 61–74.
Curtis, V.S. 2016. 'Ancient Iranian motifs and Zoroastrian iconography', in A. Williams, S. Stewart and A. Hintze (eds), *The Zoroastrian Flame. Exploring Religion, History and Tradition*, London, 179–203.
Czuma, S.J. and Morris, R. 1985. *Kushan Sculpture: Images from Early India*. Cleveland.
Dai Jianbing. 2015. 'Hetian maqian (Hanqu erti qian) de wenhua puxi ji xin faxian' [Khotan horse coins (Sino-Kharoṣṭhī coins) cultural origins and new discoveries], *Sichou zhi Lu* 24, 5–11.
Dane, R. 1908. *Frontier and Overseas Expeditions from India: supplement A. Operations Against the Mohmands*, Calcutta.
Dani, A.H. 1978. 'A Kuṣāṇa Kharoṣṭhī inscription from North Waziristan (Pakistan) dated year 39', in L. Prematileke, K. Indrapala and J.E. van Lohuizen-de Leeuw (eds), *Senarat Paranavitana Commemoration Volume*, Leiden, 48–50.
Dani, A.H., Humbach, H. and Göbl, R. 1964, 'Tochi Valley inscriptions in the Peshawar Museum', *Ancient Pakistan* 1, 125–35.
Damsteegt, T. 1978. *Epigraphical Hybrid Sanskrit: Its Rise, Spread, Characteristics and Relationship to Buddhist Hybrid Sanskrit*, Leiden.
Dar, S.R. 2004. 'Fifty years of research in Gandhara art (1947–1997)', in R.C. Sharma and P. Ghosal (eds), *Buddhism and Gandhara Art*, New Delhi, 9–34.
Daryaee, T. 2008. 'Kingship in early Sasanian dynasty', in V.S. Curtis and S. Stewart (eds), *The Sasanian Era: The Idea of Iran*, vol. 3, London, 60–70.
Das Gupta, C.C. 1958. *The Development of Kharoṣṭhī Script*, Calcutta.
Davary, G.D. 1982. *Baktrisch: ein Wörterbuch*, Heidelberg.
de Blois, F. 2008. 'Du nouveau sur la chronologie bactrienne post-hellénistique: l'ère de 223/224 ap. J.-C.', *Comptes rendus des séances de l'Académie des Inscriptions et Belles-Lettres* 2006(2), 991–7.
DeCaroli, R. 2015. *Image Problems – The Origin and Development of the Buddha's Image in Early South Asia*, Seattle.
de Callataÿ, F. 2011. 'Quantifying monetary production in Greco-Roman times: a general frame', in F. de Callataÿ (ed.), *Quantifying Monetary Supplies in Greco-Roman Times*, Bari, 7–30.

Decolonising SOAS Working Group. 2018. *Decolonising SOAS Learning and Teaching Toolkit for Programme and Module Conveners*, https://blogs.soas.ac.uk/decolonisingsoas/files/2018/10/Decolonising-SOAS-Learning-and-Teaching-Toolkit-AB.pdf.

Dehejia, V. 1991. 'Aniconism and the multivalence of emblems', *Ars Orientalis* 21, 45–66.

de la Vaissière, É. 2004. 'Sogdian trade', *Encyclopædia Iranica*, online edition, http://www.iranicaonline.org/articles/sogdian-trade.

de la Vaissière, É. 2005. *Sogdian Traders: A History* (trans. by J. Ward) of *Histoire des marchands sogdiens*, [Paris 2004], second edition, Leiden/Boston.

de la Vaissière, É. 2007. 'A note on the Schøyen copper scroll: Bactrian or Indian?', *Bulletin of the Asia Institute* 21, 127–30.

de la Vaissière, É. 2018. 'L'ère kouchane des documents bactriens', *Journal Asiatique* 306(2), 281–4.

de la Vaissière, É. and Sims-Williams, N. 2012 [2007]. 'Jabguya, i. origin and early history', *Encyclopædia Iranica*, online edition, http://www.iranicaonline.org/articles/jabguya.

Delplace, C. 2003. 'Palmyre et l'Inde (à propos del'inscription Inv. X, 88)', in P. Defosse (ed.), *Hommages à Carl Deroux* III (*Collection Latomus* 270), Bruxelles, 158–67.

Desmond, R. 1982. *The India Museum 1801–1879*, London.

Deva, K. and Mishra, V. 1961. *Vaisali Excavations*: *1950*, Allahabad.

Dewing, H.B. (trans.) 1914. *Procopius – History of the Wars*, vol. 1, London.

Dewing, H.B. (trans.) 1916. Procopius. *History of the Wars*, vol. 2, *Books 3–4. (Vandalic War)* (Loeb Classical Library 81), Cambridge, MA.

Deydier, H. 1950. *Contribution à l'étude de l'art du Gandhâra*: *essai de bibliographie analytique et critique des ouvrages parus de 1922 à 1949*, Paris.

Deyell, J. 1990. *Living without Silver: The Monetary History of Early Medieval North India*, Delhi.

Deyell, J. 2016. 'Harsha's coinage: hidden in plain sight?', *Numismatic Digest* 40, 113–24.

Deyell, J.S. 2017. *Treasure, Trade and Tradition – Post-Kidarite Coins of the Gangetic Plains and Punjab Foothills, 590–820 CE*, New Delhi.

Dharamaśī, V. 2012. *Bhagwanlal Indraji*: *The First Indian Archaeologist. Multidisciplinary Approaches to the Study of the Past*, Vadodara.

Dobbins K.W. 1970. 'The question of the imitation Hermaios coinage', *East and West* 20, 307–26.

Dobbins, K.W. 1972. *Coinage and Epigraphy of the Śakas and Pahlavas: A Reconstruction of the Political Chronology and Geography of the Indo-Iranian Borderlands 130 BC to AD 70*, PhD thesis, Australian National University, Canberra.

Dobbins, K.W. 1975. 'The Kamra Kharoṣṭhī Inscription of Vāsiṣka', *East and West* 25(1/2), 105–9.

Dodgeon, M.H. and Lieu, S.N.C. 1991. *The Roman Eastern Frontier and the Persian Wars AD 226–363. A Documentary History*, London.

Dorn'eich, C. 2008. *Zhang Qian: 'The Secret Mission of Han Emperor Wu in Search of the Ruzhi (Yuezhi) and the Fall of the Græco-Bactrian Kingdom'*, Berlin, https://docplayer.org/22571334-The-secret-mission-and-the-fall-of-the-graeco-bactrian-kingdom-annotated-compilation-of-eastern-and-western-sources.html.

Dovudi, D. 2009. Монетные клады Таджикистана [*Monetnyye klady Tadzhikistana*; Tajikistan Coin Hoards], Dushanbe.

Dowsett, C.F.J. (trans.) 1961. *Movsēs Dasxuranc'i: The History of the Caucasian Albanians*, London.

Drijvers, H.J. 1965. *Book of the Laws of Countries*, Assen.

Du Weishan. 2012. *Guishuang Diguo zhi Qianbi* (*Coins of the Kushan Empire*), Shanghai.

Dudley, S. 1997. 'Sir Richard Carnac Temple', in A. Petch (ed.), *Collectors: Collecting for the Pitt-Rivers Museum, Oxford*, Oxford, 45–8.

Dutta, K. and Robinson, A. (eds) 1997. *Selected Letters of Rabindranath Tagore*, Cambridge.

Dwivedi, M. 2012. 'Invocations through coins: legends for benediction, allegiance and popular validation in the indigenous copper coins of Indo-Gangetic divide (c. A.D. 1st century to 3rd century)', in *Proceedings of the Indian History Congress*, 72nd Session 2011, Delhi, 148–54.

Eckstein, L. 2013. 'Some reflections on entangled knowledge and decolonisation', *Zeitschrift für Religions und Geistesgeschichte*, 65(3), 283–8.

Eggermont, P.H.L. 1966. 'The Murundas and the ancient trade-route from Taxila to Ujjain', *Journal of the Economic and Social History of the Orient* 9(3), 257–96.

Eggermont, P.H.L. 1968. 'The Historia Philippica of Pompeius Trogus and the foundation of the Scythian state', in Basham 1968, 97–102.

Elliot, R. *et al.* 1982. 'Towards a material history methodology', *Material History Bulletin* 22, 31–40.

Eltschinger, V. and Yamabe, N. 2019. 'A bibliography of Aśvaghoṣa', *Journal of Indian Philosophy* 47(2), 383–404.

Enoki, K., Koshelenko, G.A. and Haidary, Z. 1994. 'The Yüeh-chih and their migrations', in J. Harmatta (ed.), *History of Civilizations of Central Asia*, Paris, 171–89.

Errington, E. 1995. 'Rediscovering the coin collection of General Claude-Auguste Court – a preliminary report', *Topoi* 5(2), 409–24.

Errington, E. 1999. 'Rediscovering the collections of Charles Masson', in Alram and Klimburg-Salter 1999, 207–37.

Errington, E. 1999–2000. 'Numismatic evidence for dating the Buddhist remains of Gandhāra', *Silk Road Art and Archaeology* 6, 191–216.

Errington, E. 2002. 'Numismatic evidence for dating the Kaniṣka reliquary', *Silk Road Art and Archaeology* 8, 101–20.

Errington, E. 2003. 'Charles Masson and Begram', *Topoi* 11(1) (2001), 357–409.

Errington, E. 2007. 'Exploring Gandhara', in Errington and Curtis 2007, 211–26.

Errington, E. 2010. 'Differences in the patterns of Kidarite and Alkhon coin distribution at Begram and Kashmir Smast', in Alram *et al.* 2010, 147–68.

Errington, E. 2012. 'Reliquaries in the British Museum', in D. Jongeward, E. Errington, R. Salomon and S. Baums, *Gandharan Buddhist Reliquaries*, Seattle, 111–63.

Errington, E. 2017a. *Charles Masson and the Buddhist Sites of Afghanistan: Explorations, Excavations, Collections 1832–1835*, London.

Errington, E. 2017b. *The Charles Masson Archive: British Library, British Museum and Other Documents Relating to the 1832–1838 Masson Collection from Afghanistan*, London.

Errington, E. 2018. 'The Buddhist remains of Passani and Bimaran and related relic deposits from south-eastern Afghanistan in the Masson collection of the British Museum', in J. Stargardt and M. Willis (eds), *Relics and Relic Worship in Early Buddhism: India, Afghanistan, Sri Lanka and Burma*, London, 31–46.

Errington, E. 2021a. *Charles Masson. Collections from Begram and Kabul Bazaar 1833–1838*, London.

Errington, E., Khera, P., Cribb, J., LKeighton-Boyce, K., and Rienjang, K. W. 2021b. 'Catalogue of Coins' in Errington 2021a, 127–210.

Errington, E. and Cribb, J. (eds) 1992. *Crossroads of Asia, Transformation in Image and Symbol in the Art of Ancient Afghanistan and Pakistan*, Cambridge.

Errington, E. and Curtis, V.S. 2007. *From Persepolis to the Punjab – Exploring Ancient Iran, Afghanistan and Pakistan*, London.

Esty, W. 2011. 'The geometric model for estimating the number of dies', in F. de Callataÿ (ed.), *Quantifying Monetary Supplies in Greco-Roman Times*, Bari, 43–58.

Evans, J. 1875 'Presidential address', *Proceedings of the Royal Numismatic Society 1874–5*, London, 10–18.

Evans, J. 1899. 'Presidential address', *Proceedings of the Royal Numismatic Society*, 24–41.

Falk H. 2001a. 'The *Yuga* of Sphujiddhvaja and the era of the Kuṣāṇas', *Silk Road Art and Archaeology* 7, 121–36.

Falk, H. 2001b. 'Names and weights inscribed on some vessels from the silver hoard', *Journal des Savants* 2001(2), 308–19 (Republished 2002 in F. Baratte, *East and West. A Central Asian Silver Hoard from the Parthian Era*, London, 53–62).

Falk, H. 2002–3. 'Some inscribed images from Mathurā revisited', *Indo-Asiatische Zeitschrift* 6–7, 31–47.

Falk, H. 2007. 'The names of the Pāratarājas issuing coins with Kharoshthī legends', *Numismatic Chronicle* 167, 171–8.

Falk, H. 2009. 'The name of Vema Takhtu', in W. Sundermann, A. Hintze and F. de Blois (eds), *Exegisti monumenta. Festschrift in Honour of Nicholas Sims-Williams* (*Iranica* 17), Wiesbaden, 105–16.

Falk, H. 2010. 'Names and titles from Kuṣāṇa times to the Hūṇas – the Indian material', in Alram *et al.* 2010, 73–89.

Falk, H. 2015a. *Kushan Histories*, Bremen.

Falk, H. 2015b. 'Kushan rule granted by Nana: the background of a heavenly legitimation', in Falk 2015a, 265–99.

Falk, H. 2016. 'Ancient India – two new Kṣaharata Kṣatrapas', *Journal of the Oriental Numismatic Society* 227, 10–11.

Falk, H. 2018. 'The five Yabghus of the Yuezhi', *Bulletin of the Asia Institute* 28 (2014), 1–43.

Falk, H. and Bennett, C. 2009. 'Macedonian intercalary months and the era of Azes', *Acta Orientalia* 70, 197–215.

Falk, H. and Sims-Williams, N. 2017. 'A decorated silver pyxis from the time of Vāsudeva', *Iranica* 25 (*Zur lichten Heimat: Studien zu Manichäismus, Iranistik und Zentralasienkundeim Gedenken an Werner Sundermann*), 121–38.

Falk, N.A. 1980. 'The case of the vanishing nuns: the fruits of ambivalence in ancient Indian Buddhism', in N.A. Falk and R.M. Gross (eds), *Unspoken Worlds: Women's Religious Lives in Non-Western Cultures*, San Francisco, 207–24.

Falkenhausen, L. von. 1999. 'Inconsequential incomprehensions: some instances of Chinese writing in alien contexts', *RES: Anthropology and Aesthetics* 35, 42–69.

Fang, J.-N., Yu, B.-S., Chen, C.-H., Wang, D. T.-Y. and Tan, L.-P. 2011. 'Sino-Kharosthi and Sino-Brahmi coins from the silk road of western China identified with stylistic and mineralogical evidence', *Geoarchaeology* 26(2), 245–68.

Farrokh, K. 2005. *Sassanian Elite Cavalry, AD 224–642*, Oxford.

Faucher, T., Tereygeol, F., Brousseau, L. and Arles, A. 2009. 'A la recherche des ateliers monétaires grecs: l'apport de l'expérimentation', *Revue Numismatique* 165, 43–80.

Field, H. and Prostov, E. 1939. 'Excavations at Khwarazm, 1937–1938', *Ars Islamica* 6(2), 158–66.

Fishman, A.M. 2013a. *The Silver Coinage of the Western Satraps in India (50–400 AD): Catalogue and Rarity Guide*, Middletown.

Fishman, A.M. 2013b. *The Base-Metal Coinage of the Western Satraps in India (50–400 AD): Catalogue and Rarity Guide*, Middletown.

Fleet, J.F. 1888. *Corpus Inscriptionum Indicarum*, vol. 3, *Inscriptions of the Early Gupta Kings and their Successors*, Calcutta.

Fogelin, L. 2015. *An Archaeological History of Indian Buddhism*, Oxford.

Foltz, R. 2010. *Religions of the Silk Road: Premodern Patterns of Globalization*, revised second edition, New York.

Foucher, A. 1905. *L'art gréco-bouddhique du Gandhara*, Paris.

Foucher, A. 1942. *La vieille route de l'Inde de Bactres à Taxila*, vol. 1, *Mémoires de la Délégation Archéologique Française en Afghanistan*, Paris.

Fox, G., Lieu, S. and Ricklefs, N. 2005. 'Select Palmyrene inscriptions', in I. Gardner, S. Lieu and K. Parry (eds), *From Palmyra to Zayton: Epigraphy and Iconography* (*Silk Road Studies* 10), Turnhout, 27–126.

Francfort, H.-P. 2013. 'Les nomades installés dans la bactriane, iie s. av. J.-C. – ier s. ap. J.-C.): nouvelles découvertes', *Comptes rendus des séances de l'Académie des Inscriptions et Belles-Lettres* (2013–14), 1543–76.

Fröhlich, C. 2008. *Monnaies indo-scythes et indo-parthes: Catalogue raisonné*, Paris.

Fussman, G. 1974. 'Documents épigraphiques kouchans', *Bulletin de l'École française d'Extrême-Orient* 61, 1–66.

Fussman, G. 1977. 'Le renouveau iranien dans l'empire kouchan', in M.J. Deshayes (ed.), *Le plateau iranien et l'Asie Centrale des origines à la conquête islamique. Leurs relations à la lumière des documents archéologiques* (*Colloques internationaux du CNRS* 567), Paris, 313–22.

Fussman, G. 1983. *Surkh Kotal: Tempel der Kuschan-Zeit in Baktrien*, Munich.

Fussman, G. 1987. 'Numismatic and epigraphic evidence for the chronology of early Gandharan art', in M. Yaldiz and W. Lobo (eds), *Investigating Indian Art*, Berlin, 67–88.

Fussman, G. 1990. 'Les monnaies', in G. Fussman and O. Guillaume, *Surkh Kotal en Bactriane*, vol. 2, *Les monnaies – Les petits objets*, Paris.

Fussman, G. 1998. 'L'inscription de Rabatak et l'origine de l'ère Saka', *Journal Asiatique* 286, 571–651.

Fussman, G. 2001. 'L'inscription de Rabatak, la Bactriane et les Kouchans', in P. Leriche, C. Pidaev, M. Gelin and K. Abdoulaev, *La Bactriane au carrefour des routes et des civilisations de l'Asie centrale, Termez et les villes de Bactriane-Tokharestan*, Actes du Colloque de Termez 1997, sous la direction de Institut Français d'Études de l'Asie Centrale (IFEAC), Paris, 2001 (published August 2002), 251–91.

Gaire, N.Y., Bhuju, D.R. and Koirala, M. 2013. 'Dendrochronological studies in Nepal: current status and future prospects', *Fuuast Journal of Biology* 3(1), 1–9.

Gardner, P. 1874. 'A coin of Heraus, Saka king', *Numismatic Chronicle*, new series, 14, 161–7.

Gardner, P. 1886. *Catalogue of Indian Coins in the British Museum: Greek and Scythic Kings of Bactria and India*, London.

Gawlikowski, M. 1994. 'Palmyra as a trading centre', *Iraq* 56, 27–33.

Geographical Journal 1932. Obituary of Milo G. Talbot, *The Geographical Journal* 79(1), 78–9.

Gershevitch, I. 1979. 'Nokonzok's well', *Afghan Studies* 2, 54–73.

Gershevitch, I. 1984. 'The Bactrian fragment in Manichean script', in J. Harmatta (ed.), *From Hecataeus to al-Óuwārizmī*, Budapest, 273–80.

Gerson da Cunha, J. 1883. *Contributions to the Study of Indo-Portuguese Numismatics*, Bombay.

Ghey, E. 2011. 'Collections online at the British Museum', in Cook 2011, 68–70.

Ghirshman, R. 1946. *Bégram, recherches archéologiques et historiques sur les kouchans*, Cairo.

Ghirshman, R. 1962. *Iran: Parthes et Sassanides*, Paris.

Ghosh, N.N. 1946. 'Do the references to the Yavana invasion of India found in the Yugapurana, Patanjali Mahabhashya and the Malavikagnimitra form the evidence of one single event?', *Proceedings of the Indian History Congress* 9, 93–103.

Ghosh, A. (ed.) 1959. *Indian Archaeology 1958–59 – A Review*, New Delhi, 12.

Ghosh, A. (ed.) 1960. *Indian Archaeology 1959–60 – A Review*, New Delhi, 15–16.

Ghosh, A. (ed.) 1961. *Indian Archaeology 1960–61 – A Review*, New Delhi, 6.

Ghosh, A. (ed.) 1964. *Indian Archaeology 1961–62 – A Review*, New Delhi, 5–6.

Ghosh, A. (ed.) 1990. *An Encyclopaedia of Indian Archaeology*, Leiden, 2 volumes.

Ghosh, S. 2012. 'Migration of the Ganasamghas: the underlying factors', *Journal of the Asiatic Society* 2012, 45–54.

Ghosh, S. 2017. *From the Oxus to the Indus: A Political and Cultural Study c. 300 BCE to c. 100 CE*, Delhi.

Given, J. 2015. *The Fragmentary History of Priscus: Attila, the Huns and the Roman Empire, AD 430–476*, Merchantville.

Glass, A. 2000. *A Preliminary Study of Kharoṣṭhī Manuscript Paleography*, MA thesis, University of Washington, Seattle.

Gnoli, G. 2009. 'Some notes upon the religious significance of the Rabatak inscription', in W. Sundermann, A. Hintze and F. de Blois (eds), *Exegisti Monumenta: Festschrift in Honour of Nicholas Sims-Williams*, Wiesbaden, 141–61.

Göbl, R. 1957. 'Die Münzprägung der Kušan von Vima Kadphises bis Bahram IV', in F. Altheim and R. Stiehl (eds), *Finanzgeschichte der Spätantike*, Frankfurt, 173–256.

Göbl, R. 1963. 'Beiträge zur Ikonographie der Kušānkönige: Huviška', *Central Asiatic Journal* 8(2), 135–42.

Göbl, R. 1965. 'Vāsiška II, ein bisher unbekannter König der späten Kušān', *Anzeiger der Österreichischen Akademie der Wissenschaften, Philosophisch-Historische Klasse* 100, 283–5.

Göbl, R. 1967. *Dokumente zur Geschichte der Iranischen Hunnen in Baktrien und Indien*, Wiesbaden, 4 volumes.

Göbl, R. 1968. 'Numismatic evidence relating to the date of Kaniṣka', in Basham 1968, 103–13.

Göbl, R. 1970. 'Der Kusanische Goldmünzscatz von Debra Damo (Aithiopien) 1940 (Vima Kadphises bis Vasudeva I)', *Central Asiatic Journal* 14(1), 241–52.

Göbl, R. 1971. *Sasanian Numismatics*, Braunschweig.

Göbl, R. 1972. 'Beiträge zur Ikonographie der Kūšānkönige II: eine Weitere Medaillonapplike von Hūviška', *Central Asiatic Journal* 16(3), 178–80.

Göbl, R. 1976. *A Catalogue of Coins from Butkara I (Swāt, Pakistan)*, Rome.

Göbl, R. 1978. *Antike Numismatik*, Munich.

Göbl, R. 1981. 'Iranisch-Hunnische Münzen I: Nachtrag', *Iranica Antiqua* 16, 173–82.

Göbl, R. 1983. 'Supplementa Orientalia I', *Litterae Numismaticae Vindobonenses* 2, 97–112.

Göbl, R. 1984. *System und Chronologie der Münzprägung des Kušānreiches*, Vienna.

Göbl, R. 1987a. 'Die Kushanischen Bronze-Appliken mit Konigsdarstellungen', *Litterae Numismaticae Vindobonenses* 3, 193–202, pls 26–8.

Göbl, R. 1987b. 'Supplementa Orientalia II', *Litterae Numismaticae Vindobonenses* 3, 203–16.

Göbl, R. 1990. 'Das Antlitz des Fremden: Der Hunnenkönig Prakasaditya in der Münzprägung der Guptadynastie', *Anzeiger der Österreichischen Akademie der Wissenschaften, Philosophisch-Historische Klasse* 126, 131–8.

Göbl, R. 1993a. *Donum Burns: Die Kušānmünzen im Münzkabinett Bern und die Chronologie*, Vienna.

Göbl, R. 1993b. 'Supplementa Orientalia III', *Quaderni ticinesi di numismatica e antichità classiche* 22, 229–42.

Göbl, R. 1999. 'The Rabatak inscription and the date of Kanishka', in Alram and Klimburg-Salter 1999, 151–75.

Gorin, A.N. 2011. 'Клад медных монет позднекушанского времени Южного Узбекистана ['Klad mednykh monet pozdne kushanskogo vremeni Yuzhnogo Uzbekistana'; 'A hoard of the late-Kushan period from southern Uzbekistan'] in *Scripta Antiqua* 1, 369–402.

Gorin, A.N. 2015. 'Кушанские монеты из Бухарского оазиса', in *Труды Государственного Эрмитажа* 75 ['Kushanskiye monety iz Bukharskogo oazisa', in *Trudy Gosudarstvennogo Ermitazha* 75; 'Kushan coins from the Bukhara oasis', in *Proceedings of the State Hermitage* 75], 53–62.

Grant, M.E. 1992. 'Dendrochronology in South Asia, an update', *South Asian Studies* 8(1), 115–23.

Greatrex, G. and Lieu, S. 2002. *The Roman Eastern Frontier and the Persian Wars*, London.

Greenwood, T. 2008. 'Sasanian reflections in Armenian sources', *e-Sasanika* 3, 1–28.

Gregory, R.A. 1943. 'Edward Heron-Allen. 1861–1943', *Obituary Notices of Fellows of the Royal Society* 4(12), 446–54.

Grenet, F. 1984. 'Notes sur le panthéon iranien des Kouchans', *Studia Iranica* 13, 253–62.

Grenet, F. 1995–6. 'Vaiśravaṇa in Sogdiana', *Silk Road Art and Archaeology* 4, 277–97.

Grenet, F. 2002. 'Regional interaction in Central Asia and Northwest India in the Kidarite and Hephthalite periods', in N. Sims-Williams (ed.), *Indo-Iranian Languages and Peoples*, Oxford, 203–24.

Grenet, F. 2005. 'Kidarites', *Encyclopædia Iranica*, online edition, http://www.iranicaonline.org/articles/kidarites.

Grenet, F. 2006. 'Nouvelles données sur la localization des cinq yabghus des Yuezhi: Arrière plan politique de l'itinéraire des marchands de Maès Titianos', *Journal Asiatique* 294, 325–41.

Grenet, F. 2015. 'Zoroastrianism among the Kushans', in Falk 2015a, 203–39.

Grenet, F., Lee, J., Martinez, P. and Ory, F. 2007. 'The Sasanian relief at Rag-i Bibi (Northern Afghanistan)', in Cribb and Herrmann 2007, 243–67.

Guenée, P. 1998. *Bibliographie analytique des ouvrages parus sur l'art du Gandhâra*, Paris.

Guerra, M.F., Demortier, G., Vitobello, M.L., Bobomulloev, S., Bagault, D., Borel, T. and Mirsaidov, I. 2009. 'Analytical study of the manufacturing techniques of Kushan gold jewellery (National Museum of Antiquities of Tajikistan)', *ArchaeoSciences* 33, 177–85, https://doi.org/10.4000/archeosciences.2184.

Gupta, P.L. 1953. 'Eastern expansion of the Kushan Empire', *Indian Historical Quarterly* 29(3), 205–21.

Gupta, P.L. 1969. *Coins*, New Delhi.

Gupta, P.L. 1973. 'A Kushana coin with a Brahmi legend', *Journal of the Numismatic Society of India* 35, 123–8.

Gupta, P.L. 1985. 'Kuṣāṇas in the Yamuno-Gangetic Region. Chronology and date', *Annali dell'Istituto Universitario Orientale di Napoli* 45, 199–222.

Gupta, P.L. 1988a. 'Early coins of Mathurā Region', in Srinivasan 1988, 124–39.

Gupta, P.L. 1988b. *Numismatic History of Himachal Pradesh and the Catalogue of Coins in Himachal State Museum, Shimla and Bhuri Sing Museum, Chamba*, New Delhi.

Gupta, P.L. and Kulashreshtha, S. 1994. *Kuṣāṇa Coins and History*, New Delhi.

Hackin, J. 1939. *Recherches archéologiques à Begram. Chantier no. 2 (1937)* (*Mémoires de la Délégation Archéologique Française en Afghanistan*), Paris.

Hackin, J., Hackin, J.R., Carl, J. and Hamelin, P. 1954. *Nouvelles recherches archéologiques à Begram (ancienne Kâpici) (1939–1940)* (*Mémoires de la Délégation Archéologique Française en Afghanistan*), Paris.

Hahn, M. 1999. *Invitation to Enlightenment. Letter to the Great King Kaniska, with a Translation of Candragomin's Letter to a Disciple*, Berkeley.

Hallisey, C. 2015. *Therigatha: Poems of the First Buddhist Women*, Cambridge, MA.

Handa, D. 2005–6. 'Huvishka's Buddha image gold coin', *Numismatic Digest* 29–30, 53–8.

Handa, D. 2007. *Tribal Coins of India*, New Delhi.

Hansen, V. 2017. *The Silk Road: A New History*, Oxford.

Harle, J.C. 1974. *Gupta Sculpture: Indian Sculptures of the Fourth to the Sixth Centuries AD*, Oxford.

Harle, J.C. 1985. 'Herakles subduing the horse(s) of Diomedes and Krsna slaying the demon-horse Késin: a common iconographic formula', in J. Schotsmans and M. Taddei (eds), *South Asian Archaeology 1983*, vol. 1, Naples, 641–52.

Harmatta, J. 1974. 'The Bactrian inscriptions at Kara Tepe', in B.G. Gafurov (ed.), *Central Asia in the Kushan Period*, vol. 1. Moscow, 328.

Harmatta, J. 1994a. 'Religions in the Kushan Empire', in J. Harmatta (ed.), *History of Civilizations of Central Asia*, vol. 2, Paris, 313–29.

Harmatta, J. 1994b. 'Languages and literature in the Kushan Empire', in J. Harmatta (ed.), *History of Civilizations of Central Asia*, vol. 2, Paris, 417–40.

Harper, P.O. 1979. 'Thrones and enthronement scenes in Sasanian art', *Iran* 17, 49–64.

Härtel, H. 1976. 'Some results of the excavations at Sonkh', *German Scholars on India*, vol. 2, 69–99.

Härtel, H. 1985. 'The Kapardin Buddha type of Mathura', in J. Schotsmans and M. Taddei (eds), *South Asian Archaeology 1983*, vol. 1, Naples, 653–78.

Härtel, H. 1987. 'Archaeological evidence on the early Vāsudeva worship', in G. Gnoli and L. Lanciotti (eds), *Orientalia Iosephi Tucci Memoriae Dicata* (*Serie Orientale Roma* 56(2)), Rome, 573–97.

Härtel, H. 1993. *Excavations at Sonkh: 2500 Years of a Town in Mathura District*, Berlin.

Haselgrove, C. and Krmnicek, S. 2012. 'The archaeology of money', *Annual Review of Anthropology* 41, 235–50.

Healy, J.F. 1978. *Metallurgy in the Greek and Roman World*, London.

Heidemann, S. 2015. 'The Hephthalite drachms minted in Balkh – a hoard, a sequence, and a new reading', *Numismatic Chronicle* 175, 330–44.

Helms, S. and Yagodin, V.N. 1997. 'Excavations at Kazakl'i-Yatkan in the Tash-Ki'rman Oasis of Ancient Chorasmia: a preliminary report', *Iran* 35, 43–65.

Henning, W.B. 1965. 'The Choresmian Documents', *Asia Major* 11, 166–79.

Herzfeld, E. 1930. *Kushano-Sasanian Coins* (*Memoirs of the Archaeological Survey of India* 38), Calcutta.

Hill, G. 1922a. *Catalogue of the Greek Coins in the British Museum: Arabia, Mesopotamia and Persia*, London.

Hill, G.F. 1922b. *A Guide to the Department of Coins and Medals in the British Museum*, third edition, London.

Hill, J.E. 2009. *Through the Jade Gate – China to Rome: A Study of the Silk Routes 1st to 2nd Centuries C.E.*, Cooktown.

Hockenhull, T. 2012. 'The British Museum and the Blitz: coins and medals in wartime', *British Numismatic Journal* 82, 192–202.

Hoernlé, A.R.R. 1899. 'A collection of antiquities from Central Asia', *Journal of the Asiatic Society of Bengal* 68(1), extra number 1, Part I – section 1, coins and seals, 1–44.

Hollister, W.C. 1976. 'Normandy, France and the Anglo-Norman Regnum', *Speculum* 51(2), 202–42.

Holmes, N.M.M. 2004. 'The Lindsay Carnegie Collection at the National Museums of Scotland', *The British Numismatic Journal* 74, 145–59.

Honigberger, J.M. 1852. *Thirty-Five Years in the East: Adventures, Discoveries, Experiments, and Historical Sketches, relating to the Punjab and Cashmere; in Connection with Medicine, Botany, Pharmacy, etc.*, London, 2 volumes.

Hordern, J. 2017. 'Bernstein's sociology of knowledge and education(al) studies', in G. Whitty and J. Furlong (eds), *Knowledge and the Study of Education: An International Exploration*, Didcot, 191–210.

Howorth, H.H. 1904. 'Some coins attributed to Babylon by Dr. Imhoof-Blumer', *Numismatic Chronicle* 4, 1–38.

Howorth, H.H. 1905. 'Some notes on coins attributed to Parthia', *Numismatic Chronicle* 5, 209–46.

Hulsewé, A.F.P. and Loewe, M.A.N. 1979. *China in Central Asia: The Early Stage: 125 BC – AD 23: An Annotated Translation of Chapters 61 and 96 of the History of the Former Han Dynasty*, Leiden.

Humbach, H. 1971. 'Die baktrische Äre des Tochi-Inschriften', in W. Eiler (ed.), *Festgabe deutscher Iranisten zur 2500 Jahrfeier Irans*, Stuttgart, 303–9.

Humbach, H. 1975. 'Vayu, Siva und der Spiritus Vivens in ostiranischen Synkretismus', *Acta Iranica* 4, 397–408.

Humbach, H. 1994. 'The Tochi inscriptions', *Studien zur Indologie und Iranistik* 19, 137–56.

Huntington, S.L. 1992. 'Aniconism and the multivalence of emblems: another look', *Orientalis* 22, 111–56.

Huyse, P. 1999. *Die dreisprachige Inschrift Šābuhrs I. An der Kaʿba-i Zardušt* (ŠKZ), *Corpus Inscriptionum Iranicarum* III(1), Text I, London, 2 volumes.

Ibis 1922. Obituary of John Biddulph, *The Ibis: A Quarterly Journal of Ornithology*, eleventh series, 4, 348–9.

Ilyasov, J.Y. and Rusanov, D.V. 1997–8, 'A study of the bone plates from Orlat', *Silk Road Art and Archaeology* 5, 107–59.

Imam, A. 1966. *Sir Alexander Cunningham and the Beginnings of Indian Archaeology*, Dhaka.

Indian Engineering. 1904. *Indian Engineering, an Illustrated Weekly* 35.

Ingholt, H. and Lyons, I. 1957. *Gandharan Art in Pakistan*, New York.

James, J.M. 1988–9. 'The iconographic program of the Wu family offering shrines (A.D. 151–ca. 170)', *Artibus Asiae* 49(1/2), 39–72.

Jayasinghe, C.N. 1997. 'Foreign influence on ancient Sri Lankan coinage', in K. Tanabe, J. Cribb and H. Wang (eds), *Studies in Silk Road Coins and Culture: Papers in Honour of Professor Ikuo Hirayama on his 65th Birthday*, Kamakura, 313–32.

Jayaswal, J.P. 1943. *Hindu Polity – A Constitutional History of India in Hindu Times*, parts 1 and 2, Bangalore.

Jayaswal, V. (ed.) 2012. *Glory of the Kushans: Recent Discoveries and Interpretations*, New Delhi.

Jayaswal, K.P. and Banerji, R.D. 1929. 'The Hathigumpha inscription of king Kharavela', *Epigraphia Indica* 20, 71–89.

Jayaswal, V. and Kumar, M. 2012. 'Urban traits and Kushan settlements of Ganga Plain', in Jayaswal 2012, 297–316.

Jayaswal, V. and Sharma, M. 2012. 'Folk practices and clay art of Kushan period', in Jayaswal 2012, 343–58.

Jettmar, K. 1991. 'Sogdians in the Indus valley', in P. Bernard (ed.), *Histoire et cultes de l'Asie centrale préislamique*, Paris.

Jha, D.N. 2004. *Early India: A Concise History*, New Delhi.

Jha, A. and Rajgor, D. 1992. *Studies in the Coinage of the Western Ksatrapas*, Nashik.

Johnson, S. 1755. *A Dictionary of the English Language*, London, 2 volumes.

Jones, H.L. (trans.) 1928. *The Geography of Strabo*, vol. 5, London

Jongeward, D. 2020. *Kushan Mystique*, London.

Jongeward, D. and Cribb, J. 2015. *Kushan, Kushano-Sasanian, and Kidarite Coins, A Catalogue of Coins from the American Numismatic Society*, New York.

Kagan, J. 2015. 'Maximilian John Borrell (c. 1802–70). Dealer, collector, and forgotten scholar and the making of the Historia Numorum', in U. Wartenberg and M. Amandry (eds), *KAIPOΣ – Contributions to Numismatics in Honor of Basil Demetriades*, New York, 83–9.

Kang, H. 2013. 'The spread of Sarnath-style Buddha images in Southeast Asia and Shandong, China, by the sea route', *Kemanusiaan* 20(2), 39–60.

Kant, S. 2000. *Hathigumpha Inscription of Kharavela and the Bhabru Edict of Asoka*, second edition, Delhi.

Karlgren, B. 1957. *Grammata Serica Recensa*, revised edition, Stockholm.

Kelleher, R. 2011. 'Coins in context: archaeology, treasure, and the Portable Antiquities Scheme', in Cook 2011, 18–24.

Kennedy, J. 1912. 'The secret of Kanishka', *Journal of the Royal Asiatic Society* 1912, 665–88.

Kennedy, J. 1913. 'A passage in the Periplus', *Journal of the Royal Asiatic Society* 1913, 127–9.

Khan, G.R. 2007a. 'Coins of Kanishka from Taxila', *Gandharan Studies* 1, 119–48.

Khan, G. 2007b. *Arabic Documents from Early Islamic Khurasan* (*Studies in the Khalili Collection of Islamic Art*, vol. 5), London.

Khan, G.R. 2008a 'Gold coins in the cabinet of Taxila Museum, Taxila', *Gandharan Studies* 2, 39–60.

Khan, G.R. 2008b. 'Copper coin hoard from the Gangudher excavations', *Journal of Humanities and Social Sciences* 16(1), 201–21.

Khan, G.R. 2009a. 'Huvishka coins from Taxila', *Gandharan Studies* 3, 75–125.

Khan, G.R. 2009b. 'Kanishka copper coins in the National Museum of Pakistan, Karachi: analysis and classifications', *Ancient Pakistan* 20, 59–79.

Khan, G.R. 2009c. 'Seleucids to Kidarites: gold coins in the cabinet of National Museum of Pakistan, Karachi', *Gandharan Studies* 3, 1–24.

Khan, G.R. 2010a. 'Copper coins of Vasudeva and his successors from Taxila', *Gandharan Studies* 4, 39–161.

Khan, G.R. 2010b. 'Copper coins of Huvishka in the National Museum of Pakistan, Karachi', *Journal of Asian Civilizations* 33(1), 61–87.

Khan, G.R. 2014. 'Soter Megas coins from Taxila', *Gandharan Studies* 8, 135–59.

Khan, M.N. 2018. *Kashmir Smast: The Earliest Seat of Hindu Learning*, Peshawar, 2 volumes.

Khan, G.R. and Blackburn, M. 2013. 'Some selected coins of the Kushan Period in the cabinet of the Fitzwilliam Museum, Cambridge', *Gandharan Studies* 7, 59–114.

Khan, G.R. and Cribb, J. 2012. 'Coins of Kujula Kadphises from Taxila', *Gandharan Studies* 6, 81–219.

Khan, G.R, and Durrani, M.A. 2018. 'A new Kushan hoard from Ray Dheri, Abazai (Charsadda, Pakistan)', *Ancient Pakistan* 29, 161–70.

Khan, G.R. and Hasan, M. 2017. 'A new hoard from Tibba Pīr Abdul Rehman, Jhang (Punjab), Pakistan: a preliminary report', *Ancient Pakistan* 28, 137–49

Khan, M.N., Errington, E. and Cribb, J. 2008. *Coins from Kashmir Smast: New Numismatic Evidence*, Peshawar.

Kielhorn, F. 1905. 'Junagadh rock-inscription of Rudradaman', *Epigraphia India* 8, 36–49.

Kim, H.J. 2013. *The Huns, Rome and the Birth of Europe*, Abingdon.

Kolb, A. and Speidel, M. 2017. 'Imperial Rome and China: communication and information transmission', in M.D. Elizalde and Wang Jianlang (eds), *China's Development from a Global Perspective*, Cambridge, 28–56.

Konow, S. 1917–18. 'Taxila inscription of the year 136', *Epigraphia Indica* 14, 284–95.

Konow, S. 1929. *Kharoshṭhī Inscriptions with the Exception of Those of Aśoka*, Calcutta.

Kopytoff, I. 1986. 'The cultural biography of things: commoditization as process', in A. Appadurai (ed.), *The Social Life of Things*, Cambridge, 64–91.

Korn, A. 2016. 'A partial tree of Central Iranian: a new look at Iranian subphyla', *Indogermanische Forschungen* 121(1), 401–34.

Kradin, N.N. 2005. 'From tribal confederation to empire: the evolution of the Rouran society', *Acta Orientalia Academiae Scientiarum Hungaricae* 58(2), 149–69.

Kreitman, N. 1992. 'Kanishka casket', in Errington and Cribb 1992, 193–7.

Krishan, Y. and Tadikonda, K.K. 2012. *The Buddha Image: Its Origin and Development*, second revised edition, New Delhi.

Krishnamurthy, R. 2007. *Late Roman Copper Coins from South India: Karur, Madurai and Tirukkoilur*, Chenna.

Kubik, A.L. 2019. 'Medallions of Huviška as pictorial evidence of pre-Islamic lamellar helmets', *Historia I Świat* 8, 11–20.

Kumar, A. 2014. 'The post Kushans "Kota" coins found from North West India', *Central Indian Journal of Historical and Archaeological Research* 3(11), 41–4.

Kumar, S. 2017. *Treasures of the Gupta Empire: A Catalogue of Coins of the Gupta Dynasty and Later Guptas, Śaśāṅka and Coinage of Bengal*, Mumbai.

Kuwayama, S. 2002. 'The Hephthalites in Tokharistan and Gandhara', in S. Kuwayama, *Across the Hindukush of the First Millennium*, Kyoto, 107–39.

Lafont, J.-M. 1992. *La présence française dans le royaume sikh du Penjab*, 1822–1849, Paris.

Lahiri, B. 1965. 'Early history of the Maghas of Kausambi', *Proceedings of the Indian History Congress* 27, 102–7.

Lahiri, B. 1974. *Indigenous States of Northern India* (*circa 200 BC to 320 AD*), Calcutta.

Lal, U.S., Rao, B.S. and Sharma, S.K. 1991. 'Scientific examination and analysis of some ancient coins', *Journal of the Numismatic Society of India* 55, 160–68.

Lam, R. 2013. 'Kuṣāṇa Emperors and Indian Buddhism: political, economic and cultural factors responsible for the spread of Buddhism through Eurasia', *South Asia* 36(3), 434–48.

Lecoq, P. 1997. *Les inscriptions de la Perse achéménide traduit du vieux perse, de l'élamite, du babylonien et de l'araméen, présenté et annoté*, Paris.

Lerner, J.A. and Sims-Williams, N. 2011. *Seals, Sealings and Tokens from Bactria to Gandhara* (*4th to 8th century CE*), Vienna.

Lévi, S. 1934. 'Devaputra', *Journal Asiatique* 224, 1–21.

Linrothe, R. 1993. 'Inquiries into the origin of the Buddha image: a review', *East and West* 43(1), 241–56.

Li Rongxi (trans.) 1995. *A Biography of the Tripiṭaka Master of the Great Ci'en Monastery of the Great Tang Dynasty* (Taisho edition, BDK Triptaka 77), Berkeley, https://bdkamerica.org/product/a-biography-of-the-tripitaka-master-of-the-great-cien-monastery/.

Li Rongxi (trans.) 1996. *The Great Tang Dynasty Record of the Western Regions* (Taisho edition, BDK Tripitaka 79), Berkeley, https://bdkamerica.org/product/the-great-tang-dynasty-record-of-the-western-regions/.

Li Rongxi (trans.) 2002. *Lives of Great Monks and Nuns* (Taisho edition, BDK Tripitaka 76), Berkeley.

Littman, R.J. and Littman, M.L. 1973. 'Galen and the Antonine Plague', *The American Journal of Philology* 94(3), 243–55.

Litvinsky, B.A. 2001. 'The Bactrian ivory plate with a hunting scene from the Temple of the Oxus', *Silk Road Art and Archaeology* 7, 137–66.

Liu Xinru. 2001. 'Migration and settlement of the Yuezhi-Kushan: interaction and interdependence of nomadic and sedentary society', *Journal of World History* 12(2), 261–92.

Livshits, V.A. 1969. 'K otkritiyu baktriyskikh nadpisey na Kara-tepe', *Buddiye peshcheri Kara-tepe v Starom Termeze*, Moscow, 47–81, 208–9.

Lockyear, C. 2012. 'Dating coins, dating with coins', *Oxford Journal of Archaeology* 31(2), 191–211.

Loginov, S.D. and Nikitin, A.B. 1993a. 'Sasanian coins of the third century from Merv', *Mesopotamia* 28, 225–41.

Loginov, S.D. and Nikitin, A.B. 1993b. 'Coins of Shapur II from Merv', *Mesopotamia* 28, 247–69.

Lüders, H. 1961. *Mathurā Inscriptions*, unpublished papers edited by K.L. Janert, Göttingen.

Lukonin, V.G. 1967. 'Kushano-sasanidskie monety' [Kushanian-Sasanian coins], *Epigrafika Vostoka* 18, 16–33.

MacDowall, D.W. 1960. 'The weight standards of the gold and copper coinages of the Kushana dynasty from Vima Kadphises to Vasudeva', *Journal of the Numismatic Society of India* 22, 62–74.

MacDowall, D.W. 1965. 'The dynasty of the later Indo-Parthians', *Numismatic Chronicle*, seventh series, 5, 137–48.

MacDowall, D.W. 1968. 'Soter Megas, the King of Kings, the Kushana', *Journal of the Numismatic Society of India* 30, 28–48.

MacDowall, D.M. 1973. 'The Azes hoard from Shikhan Dheri: fresh evidence for the context of Jihonika', in N. Hammond (ed.), *South Asian Archaeology 1971*, London, 215–30.

MacDowall, D.W. 1979. 'Pre-Islamic coins in Herat Museum', *Afghan Studies* 2, 45–54.

MacDowall, D.W. 2005. 'The enigma of the later Kuṣāṇa copper coinages', *East and West* 55(1/4), 189–99.

MacDowall, D.W. 2007a. 'Coinage from Iran to Gandhara – with special reference to divinities as coin types', in D. Srinivasan (ed.), *On the Cusp of an Era: Art in the Pre-Kuṣāṇa World*, Leiden, 233–66.

MacDowall, D.W. 2007b. 'Numismatic evidence for a chronological framework for pre-Kaniṣkan art, from Khalchayan to Gandhāra' in D. Srinivasan, (ed.), *On the Cusp of an Era: Art in the Pre-Kuṣāṇa World*, Leiden, 95–117.

MacDowall, D.W. and Callieri, P.-F. 2004. 'A catalogue of coins from the excavations at Bīr-Koṭ-Ghwaṇḍai 1984–1992', in *Bīr-Koṭ-Ghwaṇḍai Interim Reports* 2, Rome.

MacDowall, D.W. and Ibrahim, M. 1978. 'Pre-Islamic Coins in Kandahar Museum', *Afghan Studies* 1, 67–77.

MacDowall, D.W. and Wilson, D.G. 1970. 'The references to the Kushans in the Periplus and further evidence for its date', *Numismatic Chronicle*, seventh series, 10, 221–40.

MacKenzie, D.N. 1971. *A Concise Pahlavi Dictionary*, London.

Maenchen-Helfen, O. 1943. 'From China to Palmyra', *The Art Bulletin* 25(4), 358–62.

Maenchen-Helfen, O. 1945. 'The Yüeh-Chih problem re-examined', *Journal of the American Oriental Society* 65(2), 71–81.

Magie, D. and Ballou, S.H. (trans.) 1922. *The Scriptores Historiae Augustae*, vol. 1, London.

Magie, D. and Ballou, S.H. (trans.) 1932. *The Scriptores Historiae Augustae*, vol. 3, London.

Maity, S.K. 1958. 'The gold content of the Kushana, the Kushana Chiefs and the Sassanian gold coins from the Indian Museum, Calcutta', *Journal of the Numismatic Society of India* 20(2), 162–71.

Maity, S.K. 1970. *Early Indian Coins and the Currency System*, New Delhi.

Mallory, J.P. and Mair, V.H. 2000. *The Tarim Mummies*, London.

Mamania, D. and Singh, M.R. 2019. 'Analysis of Kushan coins (1st–3rd centuries C.E.) by multi-spectroscopic techniques', *Journal of Applied Spectroscopy* 86, 948–54.

Mani, B.R. 1987. *The Kushan Civilization: Studies in Urban Development and Material Culture*, New Delhi.

Manville, H.E. 2009. *Biographical Dictionary of British and Irish Numismatics*, London.

Martin, M.F.C. 1937. 'Coins of Kidāra and the Little Kushāns', *Journal of the Royal Asiatic Society of Bengal Numismatic Supplement* 47, 23–50.

Majumdar, N.G. 1937. *A Guide to the Sculptures in the Indian Museum*, part 2, *The Graeco-Buddhist School of Gandhara*, Delhi.

Majumdar, R.C. (ed.) 1951. *The History and Culture of the Indian People*, vol. 2, *The Age of Imperial Unity*, Bombay.

Majumdar, R.C. (ed.) 1954. *The History and Culture of the Indian People*, vol. 3, *The Classical Age*, Bombay.

Majumdar, A.K. 1977. *Concise History of Ancient India*, vol. 1, *Ancient History*, New Delhi.

Mak, B.M. 2013. 'The last chapter of Sphujidhvaja's *Yavanajātaka* critically edited with notes', *Sources and Commentaries in the Exact Sciences* 14, 59–148.

Mallory, J.P. 2015. *The Problem of Tocharian Origins: An Archaeological Perspective* (*Sino-Platonic Papers* 259), Philadelphia.

Manassero, N. 2013. 'Tamgas, a code of the steppes. Identity marks and writing among the ancient Iranians', *The Silk Road* 11, 60–9.

Mann, R. 2014. 'Material culture and ruler ideology: the case of Huviṣka's Skanda-Kumāra with Viśākha coinage', in B. Fleming and R. Mann (eds), *History and Material Culture in Asian Religions*, New York, 229–51.

Margabandhu, C. 2010. 'Planning and development of the Kushan settlement at Sanghol', in H.P. Ray (ed.), *Sanghol and the Archaeology of Punjab*, New Delhi, 106–27.

Maricq, A. 1958a. 'Res Gestae Divi Saporis', *Syria* 35(3/4), 295–360.

Maricq, A. 1958b. 'Inscriptions de Surkh Kotal (Baghlan)', *Journal Asiatique* 246, 345–440.

Mariottini Spagnoli, M. 1967. 'The symbolic meaning of the club in the iconography of the Kuṣāṇa kings', *East and West* 17, 248–67.

Markham, C.R. 1871. *A Memoir on the Indian Surveys*, London.

Marquart, J. 1901. *Eransahr nach der Geographie des Ps. Moses Xorenac'i*, Berlin.

Marshak, B. and Grenet, F. 2006. 'Un peinture kouchane sur toile', *Comptes rendus des séances de l'Académie des Inscriptions et Belles-Lettres* 2006(2), 947–63.

Marshall, J. 1914. 'Date of Kanishka', *Journal of the Royal Asiatic Society* 1914, 973–86.

Marshall, J. 1923. 'Influence of race on early Indian art', *Journal of the Royal Society of Arts* 71, 659–67.

Marshall, J. 1951. *Taxila*, Cambridge, 3 volumes.

Masson, C. 1834. 'Memoir on the ancient coins found at Beghram, in the Kohistán of Kábul', *Journal of the Asiatic Society of Bengal* 3, 153–75.

Masson, C. 1836a. 'Second memoir on the ancient coins found at

Beghrám, in the Kohistán of Kábul', *Journal of the Asiatic Society of Bengal* 5, 1–28.
Masson, C. 1836b. 'Third memoir on the ancient coins discovered at a site called Beghrám, in the Kohistán of Kábul', *Journal of the Asiatic Society of Bengal* 5, 537–48.
Masson, M.E. 1950. 'Proiskhozhdenie bezymennogo "tsarya tsarei – velikogo spasitelya" ', in *Trudy Spedneaziatskogo Gosudarstvennogo Universiteta: Arkheologiya Srednei Azii*, Tashkent, 11–49.
McCrindle, J.W. 1885. *Ancient India as Described by Ptolemy*, Calcutta.
McLaughlin, R. 2014. *The Roman Empire and the Indian Ocean: The Ancient World Economy and the Kingdoms of Africa, Arabia and India*, Barnsley.
Melzer, G. 2006. 'A Copper scroll inscription from the time of the Alchon Huns', in J. Braarvig (ed.), *Manuscripts in the Schøyen Collection*: *Buddhist Manuscripts*, vol. 3, Oslo, 251–78.
Meyers, P. 1969. 'Non-destructive activation analysis of ancient coins using charged particles and fast neutrons', *Archaeometry* 11, 67–83.
Michon, D. 2010a. 'The excavations at Sanghol in context', in H.P. Ray (ed.), *Sanghol and the Archaeology of Punjab*, New Delhi, 69–105.
Michon, D. 2010b. 'Searching for Alexander and Buddha: a history of the exploration and archaeology of the Early Historic period in Punjab to 1900', in H.P. Ray (ed.), *Sanghol and the Archaeology of the Punjab*, New Delhi, 20–45.
Mielczarek, M. 1993. *Cataphracti and Clibanarii, Studies on the Heavy Armoured Cavalry of the Ancient World*, Lodz.
Miller, B.K. 2012. 'Vehicles of the steppe elite: chariots and carts in Xiongnu tomb', *The Silk Road* 10, 29–38.
Mitchiner, M. 1971. 'A series of struck imitations of the Kanishka-Huvishka copper coinage and its links to the cast Puri-Kushana coinage', *Journal of the Numismatic Society of India* 33, 37–43.
Mitchiner, M. 1975. 'A hoard of late Kushan gold staters', *East and West* 25(1/2), 147–56.
Mitchiner, M. 1975–6. *Indo-Greek and Indo-Scythian Coinage*, London, 9 volumes (1–4 1975; 5–9 1976).
Mitchiner, M. 1978. *Oriental Coins and Their* Values, vol. 2: *Ancient and Classical World, 600 B.C.–A.D. 650*, London.
Mitchiner, M. 1979. *Oriental Coins and Their Values*, vol. 3: *Non-Islamic States and Western Colonies AD 600–1979*, London.
Mitchiner, M. 2004. *Ancient Coins and Early Trade*, London, 2 volumes.
Mitterwallner, G. von. 1986. *Kuṣāṇa Coins and Kuṣāṇa Sculptures from Mathurā*, Mathura.
Mitterwallner, G. von. 1991. 'The Sargodha hoard of late Kuṣāṇa coins in the Lahore Museum', *Lahore Museum Bulletin* 4(2), 69–92.
Mode, M. 1997. 'Some notes on the sword of Kanishka', in R. Allchin and B. Allchin (eds), *South Asian Archaeology 1995: Proceedings of the 13th Conference of the European Association of South Asian Archaeologists*, Cambridge, 543–56.
Mode, M. 2003. 'Heroic fights and dying heroes – The Orlat battle plaque and the roots of Sogdian art', in *Ērān ud Anērān Webfestschrift Marshak*, http://www.transoxiana.org/Eran/Articles/mode.html.
Mode, M. 2013. 'Die Skulturenfriese von Chalčajan. Neue Rekonstruktionversuche zur Kunst der frühen Kuschan in Baktrien', in G. Lindström, S. Hansen, A. Wieczorek and M. Tellenbach (eds), *Zwischen Ost und West neue Forschungen zum Zentralasien*, Darmstadt, 205–20.
Mookerji, R.K. 1951. 'The fall of the Magadhan empire', in Majumdar 1951, 95–100.
Mordini, A. 1960. 'Gli aurei Kushana del convento di Dabra Dammo. Un'indizio sui rapporti commerciali fra l'India e l'Ethiopa nei primo secoli dell'era volgare', *Atti del convegno internationale di studi Etiopici 1959*, Rome, 249–54.
Mordini, A. 1967. 'Gold Kushan coins in the convent of Dabra Dammo', *Journal of the Numismatic Society of India* 29, 19–25.
Morris, L. 2017. 'Revised dates for the deposition of the Begram hoard and occupation at the New Royal City', *Parthica* 19, 75–104.
Morris, L. 2019. 'Constructing Ancient Central Asia's Economic History', in S. von Reden (ed.), *Handbook of Ancient Afro-Eurasian Economies*, vol. 1, *Contexts*, Berlin, 669–92.
Morris, L. 2021. 'The excavations of the Délégation archéologique française en Afghanistan at Begram (1936–1946)', in Errington 2021a, 20–34.
Mosteller, J.F. 1991. *The Measure of Form: A New Approach for the Study of Indian Sculpture*, New Delhi.
Mukherjee, B.N. 1960. 'The prototype of an obverse device of Kusana coinage', *Journal of the Numismatic Society of India* 22, 109–12.
Mukherjee, B.N. 1967. *The Kushāṇa Genealogy*, Calcutta.
Mukherjee, B.N. 1969. *Nanā on Lion: A Study in Kushāṇa Numismatic Art*, Calcutta.
Mukherjee, B.N. 1972. *The Pāradas: A Study in their Coinage and History*, Calcutta.
Mukherjee, B.N. 1977. 'Tribal Coins of Ancient India – A Study in Terminology', in J.P. Singh and N. Ahmad (eds), *Seminar Papers on the Tribal Coins of Ancient India (c. 200 BC to 400 AD)*, Varanasi, 21–7.
Mukherjee, B.N. 1978. *Kushāṇa Coins of the Land of the Five Rivers*, Calcutta.
Mukherjee, B.N. 1987. 'A Mathura image inscription', *Indian Museum Bulletin* 22, 28–9.
Mukherjee, B.N. 1988. *The Rise and the Fall of the Kushāṇa Empire*, Calcutta.
Mukherjee, B.N. 1990. *The Indian Gold: An Introduction to the Cabinet of the Gold Coins in the Indian Museum*, Calcutta.
Mukherjee, B.N. 1995. 'The great Kushāṇa testament', *Indian Museum Bulletin* 30, 1–105, pls I–XII.
Mukherjee, B.N. 1997. 'Durvāsā, the city-deity of Pushkalāvati', *Journal of Numismatic Society of India* 59, 43–5.
Mukherjee, B.N. 1998. 'The great Kushan testament', *Indian Museum Bulletin* 32 (1995), 1–105.
Mukherjee, B.N. 2004. *Kushāṇa Studies: New Perspectives*, Kolkata.
Müller, K. 1851. *Fragmenta Historicorum Graecorum*, vol. 4, Paris.
Müller, F.W.K. 1918. 'Toxri und Kuišan (Küšän)', *Sitzungsberichte der Preussischen Akademie der Wissenschaften, Philosophisch-Historische Klasse* 28, 566–86.
Munro-Hay, S.C., Oddy, W.A. and Cowell, M.R. 1988. 'The gold coinage of Aksum: new analyses and their significance for chronology', *Metallurgy in Numismatics* 2, 1–16.
Narain, A.K. 1957. *Indo-Greeks*, Oxford.
Narain, A.K. 1968. 'The date of Kaniṣka', in Basham 1968, 206–43.
Narain, A.K. 1987. *On the 'First' Indo-Europeans: the Tocharian-Yuezhi and their Chinese Homeland* (*Papers on Inner Asia* 2), Bloomington.
Narain, A.K. 1988. Ancient Mathurā and the numismatic material', in Srinivasan 1988, 115–18.
Narain, A.K. 1990. 'Indo-Europeans in Central Asia', in D. Sinor (ed.), *The Cambridge History of Inner Asia*, Cambridge, 151–76.
Nattier, J. 2008. *A Guide to the Earliest Chinese Buddhist Translations*: *Texts from the Eastern Han 'Dong Han' and Three Kingdoms 'San Guo' Periods*, Tokyo.
Naymark, A. 1991. 'Ancient Sogdian Coins', in *Culture and Art of Ancient Uzbekistan. Exhibition Catalog*, vol. 1, Moscow, 153–64.
Naymark, A. 2016. 'The coinage of Nakhshab during the first-fourth centuries CE. Towards a new systematization of Sogdian coinages and the political history of Sogd during Antiquity', *Journal of Inner Asian Art and Archaeology* 7 (2012), 55–77.

Nicolle, D. 1996. *Sassanian Armies: The Iranian Empire, Early 3rd to Mid 7th Centuries AD*, Stockport.

Nikitin, A.B. 1999. 'Notes on the chronology of the Kushano-Sasanian kingdom', in Alram and Klimburg-Salter 1999, 259–63.

Nikonorov, V.P. 1997. *The Armies of Bactria 700 BC–450 AD*, Stockport.

Nixon, C.E.V. and Rodgers, B.S. 2015. *In Praise of Later Roman Emperors: The Panegyrici Latini*, Berkeley.

Norman, K.R. 1971. *Elders' Verses II – Therīgāthā, Pali Text Society*, Lancaster.

O'Connor, D.P. 2002. *The Zulu and the Raj: The Life of Sir Bartle Frere*, New York.

Oddy, W.A. 1970. 'A reappraisal of the specific gravity method for the analysis of gold alloys', *Archaeometry* 12(1), 1–11.

Oddy, W.A. 1972. 'The analysis of gold coins – a comparison of results obtained by non-destructive methods', *Archaeometry* 14(1), 109–17.

Oddy, A. 1998. 'The analysis of coins by the Specific Gravity method', in W.A. Oddy and M.R. Cowell (eds), *Metallurgy in Numismatics* 4, 147–58.

Oddy, W.A. and Blackshaw, S.M. 1974. 'The accuracy of the Specific Gravity method for the analysis of gold alloys', *Archaeometry* 16(1), 81–90.

Oddy, W.A. and Cribb, J. 1998. 'Debasement and sequence of Late Kushana gold coins', in A.K. Jha and S. Garg (eds), *Ex Moneta: Essays on Numismatics in Honour of Dr. David MacDowall*, New Delhi, 275–92.

Oddy, W.A. and Hughes, M.J. 1972. 'The specific gravity method for the analysis of gold coins', in E.T. Hall and D.M. Metcalf (eds), *Methods of Chemical and Metallurgical Investigation of Ancient Coinage* (Royal Numismatic Society Special Publication No. 8), London, 75–87.

O'Dwyer, M.F. 1926. 'Races and religions in The Punjab', *Journal of the Royal Society of Arts* 74, 420–49.

Oldfield, C.H. (trans.) 1946. *Diodorus of Sicily*, vol. 4, London,.

Olivelle, P. 1999. *The Dharmasūtras: The Law Codes of Ancient India*, Oxford.

Olivelle, P. 2004. *The Law Code of Manu*, Oxford.

Olivelle, P. 2013. *King, Governance, and Law in Ancient India*: *Kauṭilya's Arthaśāstra*: *A New Annotated Translation*, New York.

Olivieri, L.M. 2006. 'The IsIAO Italian Archaeological Mission in Pakistan: a select bibliography (1956–2006)', *East and West* 56(1), 301–18.

Olivieri, L.M., Marzaioli, F., Passariello, I., Iori, E., Micheli, R., Terrasi, F., Vidale, M., and D'Onofrio, A. 2019. 'A new revised chronology and cultural sequence of the Swat valley, Khyber Pakhtunkhwa (Pakistan) in the light of current excavations at Barikot (Bir- kot-ghwandai)', *Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms* 456, 148–56.

Ollett, A. 2019. 'Making it nice: Kāvya in the second century', *Journal of Indian Philosophy* 46(2), 269–87.

Opała, M., Niedzwiedz, T., Rahmonov, O., Owczarek, P. and Małarzewski, Ł. 2017. 'Towards improving the Central Asian dendrochronological network – New data from Tajikistan, Pamir-Alay', *Dendrochronologia* 41, 10–23.

Opała-Owczarek, M., Owczarek, P., Rahmonov, O. and Niedźwiedź, T. 2018. 'The first dendrochronological dating of timber from Tajikistan – Potential for developing a millennial tree-ring record', *Tree-Ring Research* 74(1), 50–62.

Pal, P. 1986. *Indian Sculpture – A Catalogue of the Los Angeles County Museum*, Berkeley.

Pal, P. 1988. 'Siva as Dispenser of Royal Glory on Kushan Coins', *Bulletin of the Asia Institute* 1988, 31–4.

Pal, P. 2007. 'Faith and form: religious sculpture in ancient Kashmir', in P. Pal (ed.), *The Arts of Kashmir*, New York, 60–99.

Palmer, J. and Ahmed, M. 2011. 'Application of tree-ring research in Pakistan', *Fuuast Journal of Biology* 1(1), 19–27.

Panaino, A. 2009. 'The King and the Gods in the Sasanian royal ideology', in R. Gyselen (ed.), *Sources pour l'histoire et la géographie du monde iranien* (*Res Orientales* 18), Leuven, 209–56.

Parasher, A. 1991. *Mlecchas in Early India: A Study in Attitudes towards Outsiders up to AD 600*, New Delhi.

Pargiter, F.E. 1913. *The Purāṇa Text of the Dynasties of the Kali Age*, London.

Pargiter, F.E. 1920. 'Vincent Arthur Smith', *The Journal of the Royal Asiatic Society of Great Britain and Ireland* 3, 391–5.

Paruck, F.D.J. 1936. 'Observations sur cinq monnaies Sassanides', *Revue Numismatique* 39, 71–85 (reprinted in English in 1939 as: 'Observations on five Sassanian coins', *Journal of the Numismatic Society of Indi*a 1, 58–71).

Pearce, H. 1898. *Soldier and Traveller: Memoirs of Alexander Gardner, Colonel of Artillery in the Service of Maharaja Ranjit Singh*, London.

Perkins, J. 2007. 'Three-headed Siva on the reverse of Vima Kadphises' copper coinage', *South Asian Studies* 23, 31–7.

Petech, L. 1968. 'Kasmiri and Tibetan materials on the date of Kaniṣka', in Basham 1968, 244–6.

Peterson, P. 1888. 'Obituary – Pandit Bhagvanlāl Indrajī', *Journal of the Royal Asiatic Society* 20, 450–2.

Pfister, R. 1937. *Nouveaux Textiles de Palmyre*, Paris.

Pfister, R. 1940. *Textiles de Palmyre*, vol. 3, Paris.

Pfisterer, M. 2013. *Hunnen in Indien: Die Münzen der Kidariten und Alchan aus dem Bernischen Historischen Museum und der Sammlung Jean-Pierre Righetti*, Vienna.

Pieper, W. 2013. *Ancient Indian Coins Revisited*, Lancaster, PA.

Pingree, D. 1978. *The Yavanajātaka of Sphujidhvaja*, Cambridge, MA, 2 volumes.

Pokharna, P. 1981. 'Later Kushana coins from Rajasthan', *Numismatic Digest* 2, 25–35.

Pollock, S. 2006. *The Language of the Gods in the World of Men: Sanskrit, Culture, and Power in Premodern India*, Berkeley.

Porter, V. 2011. *Arabic and Persian Seals and Amulets in the British Museum*, London.

Potter, K.H. (ed.) 1996. 'Abhidharma Buddhism to 150 A.D.', *Encyclopedia of Indian Philosophies*, vol. 7, Delhi, 121–33.

Power, S., Brannen, J., Aggleton, P., Brown, A., Chisholm, L. and Mace, J. *et al.* 2001. *A tribute to Basil Bernstein: 1924–2000*, London.

Prasad, P. 2014. *Imperial Kushanas in Uttar Pradesh*, Delhi.

Prinsep, J. 1835. 'On the connection of various ancient Hindu coins with the Grecian or Indo-Scythian series', *Journal of the Asiatic Society of Bengal* 4, 621–43.

Prinsep, J. 1836. 'New varieties of the Mithraic or Indo-Scythic series of coins, and their imitations', *Journal of the Asiatic Society of Bengal* 5, 639–57.

Pruitt, W. 1998. *The Commentary on the Verses of the Therīs*, Oxford.

Pugachenkova, G.A. 1971. *Skul'ptura Khalčajana*, Moscow.

Pugachenkova, G.A. (ed.) 1991. *Drevnosti yuzhnogo Uzbekistana*, Tashkent.

Pulleyblank, E. 1966. 'Chinese and Indo-Europeans', *Journal of the Royal Asiatic Society* 1966(2), 9–39.

Pulleyblank, E. 1995. 'Why Tocharians', *Journal of Indo-European Studies* 23, 415–30.

Puri, B.N. 1965. *India under the Kushans*, Delhi.
Puri, B.N. 2014. *Kuṣāṇas in India and Central Asia*, New Delhi.
Puri, N. K., Hajivaliei, M., Bedi, S. C. Singh, N., Govil, M., Garg, M. L., Handa, D. K., Govil, K. L. Rout, B., and Vijayan, V. 2003. 'The elemental analysis of ancient Indian coins of Kusanas and early medieval period using proton induced X-Ray emission (PIXE) technique' *International Journal of PIXE* 13(3), 149–61.
Quintanilla, S.R. 2007. *History of Early Stone Sculpture at Mathura, ca. 150 BCE – 100 CE*, Leiden.
Rackham, H. (trans.) 1938. *Pliny: Natural History*, vol. 3, London.
Rackham, H. (trans.) 1942. *Pliny: Natural History*, vol. 2, London.
Rajgor, D. 1991. 'A hoard of late Kushan coppers from Bhuj (India), in T. Hackens and G. Moucharte (eds), *Actes de XIe Congrès international de numismatique, Bruxelles 8–13 septembre 1991*, vol. 3, Louvain, 233–41.
Rajurkar, N.S., Bhadane, R.P. and Angal, D.G. 1993. 'Multielemental instrumental neutron activation analysis of some ancient Indian coins', *Applied Radiation and Isotopes* 44(4), 781–2.
Rapin, C. 2007. 'Nomads and the shaping of Central Asia: from the Early Iron Age to the Kushan period', in Cribb and Herrmann 2007, 29–72.
Rapson, E.J. 1901. 'Impressions of inscriptions received from Captain A. H. McMahon, political agent for Swat, Dir, and Chitral', *Journal of the Royal Asiatic Society of Great Britain and Ireland*, 291–4.
Rapson, E.J. 1908. *A Catalogue of the Indian Coins in the British Museum: Coins of the Andhra Dynasty, the Western Kṣatrapas, the Traikūṭaka Dynasty and the 'Bodhi' Dynasty*, London.
Raven, E. 1991. *Gupta Gold Coins with a Garuda-Banner*, Groningen, 2 volumes.
Ray, H.C. 1931. *The Dynastic History of Northern India (Early Medieval Period)*, vol. 1, Calcutta.
Ray, S.C. 1988. 'Stratigraphic evidence of coins from excavations at Mathurā', in Srinivasan 1988, 140–5.
Ray, H.P. 2007. 'Alexander's Campaign (327–326 BC): a chronological marker in the archaeology of India', in H.P. Ray and D.T. Potts (eds), *Memory as History: The Legacy of Alexander in Asia*, New Delhi, 105–21.
Ray, H.P. 2010a. *Archaeology and Text*: *The Temple in South Asia*, New Delhi.
Ray, H.P (ed.) 2010b. *Sanghol and the Archaeology of Punjab*, New Delhi.
Rehatsek, E. (trans.) 1892. *The Rauzat-us-safa or Garden of Purity, by Muhammad bin Khavendshah bin Mahmud, Commonly Called Mirkhond*, London.
Rezakhani, K. 2017. *ReOrienting the Sasanians: East Iran in Late Antiquity*, Edinburgh.
Rhi, Juhyung. 1994. 'From Bodhisattva to Buddha: the beginning of iconic representation in Buddhist art', *Artibus Asiae* 54(3/4), 207–25.
Rhodes, N. 2016. 'Samatata – the coinage', *Journal of the Oriental Numismatic Society* 228, 10–15 (ed. W. Bartsch).
Rhodes, N.G., Gabrisch, K. and Valdettaro, C. 1989. *The Coinage of Nepal, from the Earliest Times until 1911*, London.
Rhys Davids, T.W. (trans.) 1890. *The Questions of King Milinda*, Oxford.
Riches, L. 1996. 'Overstrikes of the Kota coinage of North West India, c.270–350 AD', *Journal of the Oriental Numismatic Society* 148, 18.
Riches, L. 1999. 'A report regarding a hoard of Kota and Kota-related copper coins from the Punjab and a possible fixed dating for them', *Journal of the Oriental Numismatic Society* 159, 12–13.
Riches, L. 2000. 'A new variety in the Kota series from Haryana', *Journal of the Oriental Numismatic Society* 164, 23.
Riches, L. 2001. 'Palaeographic peculiarities of the Kota coinage', *Journal of the Oriental Numismatic Society* 166, 16–17.
Riefstahl, R.M. 1935. 'Recent discoveries in Palmyra', *Parnassus* 7(4), 15–18.
Rienjang, W. 2016. *Honouring the Body: Relic Cult Practice in Eastern Afghanistan with Comparison to Dharmarajika Pakistan*, D.Phil. thesis, University of Cambridge.
Rodgers, C.J. 1891. *Catalogue of the Coins in the Government Museum, Lahore*, Calcutta.
Rodgers, C.J. 1895. *Catalogue of the Coins Collected by Chas. J. Rodgers, and Purchased by the Government of the Panjáb:* Part III, *Græco-Bactrian and other Ancient Coins*, Calcutta.
Rodgers, C.J. 1896. *Catalogue of the Coins of the Indian Museum*, Calcutta.
Rolfe, J.C. (trans.) 1935. *Ammianus Marcellinus. History. Books 14–19*, vol. 1, London.
Rolfe, J.C. (trans.) 1940. Ammianus Marcellinus – *Rerum Gestarum*, vol. 2, London.
Rosenfield, J.M. 1963. 'On the dated carvings of Sarnath', *Artibus Asiae* 26, 10–26.
Rosenfield, J.M. 1967. *The Dynastic Arts of the Kushans*, Berkeley.
Rowland, B. 1953. *The Art and Architecture of India, Buddhist, Hindu, Jain*, London.
Rtveladze, E.V. 1982. 'Об ареале и хронологии сасанидских завоеваний в Северной Бактрии – Тохаристане', in *Общественные науки в Узбекистане* 1. ['Ob areale i khronologii sasanidskikh zavoyevaniy v Severnoy Baktrii – Tokharistane', in *Obshchestvennyye nauki v Uzbekistane* 1, 'On the area and chronology of the Sassanid conquests in North Bactria – Tocharistan', in *Social Sciences in Uzbekistan* 1], 47–54.
Rtveladze, E.V. and Pidaev, S.R. 1981. *Katalog Drevnikh Monet Yuzhnogo Uzbekistana*, Tashkent.
Sachs, C. and Blet-Lemarquand, M. 2005. 'Le monnayage d'Or Kouchans et de leurs succeseurs nomads: alteration et chronologie', International Numismatic Congress, in C. Alfaro *et al.* (eds), *Acts of the Thirteenth International Congress of Numismatics in Madrid, 15–20 September 2003*, Madrid, 1659–69.
Sachs, C., Blet-Lemarquand, M. and Gratuze, B. 2003. 'Médaillon avec monnaie Koushane sertie', in O. Bopearachchi, C. Landes and C. Sachs (eds), *De l'Indus à l'Oxus. Archéologie de l'Asie Centrale, Catalogue de l'Exposition du Musée de Lattes, Lattes*, 189–90.
Said, E.W. 1978. *Orientalism*, London.
Sale, F. 1843. *A Journal of the Disasters in Affghanistan 1841–2*. London.
Salomon, R. 1990. 'New evidence for a Gāndhārī origin of the Arapacana syllabary', *Journal of the American Oriental Society* 110(2), 255–73.
Salomon, R. 1998. *Indian Epigraphy: A Guide to the Study of Inscriptions in Sanskrit, Prakrit and the Other Indo-Aryan Languages*, New York.
Salomon, R. 1999. 'A stone inscription in Central Asian Gāndhārī from Endere (Xinjiang)', *Bulletin of the Asia Institute* 13, 1–13.
Salomon, R. 2002a. 'A fragment of a collection of Buddhist legends, with a reference to King Huviska as a follower of the Mahayana', in J. Braarvig (ed.), *Manuscripts in the Schøyen Collection* III: *Buddhist Manuscripts*, vol. 2, Oslo, 255–68.
Salomon, R. 2002b. 'Gāndhārī and other Indo-Aryan languages in the light of newly-discovered Kharoṣṭhi manuscripts', in N. Sims-Williams (ed.), *Indo-Iranian Languages and Peoples*, Oxford, 119–34.
Salomon, R. 2005. 'Indo-Greek era of 186/5 BC in a Buddhist reliquary inscription', in O. Bopearachchi and M.-F. Boussac (eds), *Afghanistan: ancien carrefour entre l'Est et l'Ouest*, Turnhout, 359–401.
Salomon, R. 2018. *The Buddhist Literature of Ancient Gandhara*, Somerville, MA.
Sangzai, A.M. and Ahmed, M. 2011. 'Dendrochronology potential of

Juniperus Excelsa (M. Bieb) from dry temperate forest of Balochistan province, Pakistan', *Fuuast Journal of Biology* 1(2), 65–70.
Sargent, T.J. and Smith, B.D. 1997. 'Coinage, debasements, and Gresham's Laws', *Economic Theory 120(2), 197–226.*
Sarianidi, V. 1985. *Bactrian Gold: From the Excavations of the Tillya-Tepe Necropolis in Northern Afghanistan*, Leningrad.
Schindel, N. 2004. *Sylloge Nummorum Sasanidarum: Paris, Berlin, Wien* III/1, Vienna, 2 volumes.
Schindel, N. 2005. 'Adhuc sub iudice lis est? zur Datierung der Kushanosassanidischen Münzen', in H. Emmerig (ed.), *Vindobona Docet*, Vienna, 217–41.
Schindel, N. 2009. 'Ardashir 2 Kushanshah and Huvishka the Kushan: numismatic evidence for the date of the Kushan King Kanishka I', *Journal of the Oriental Numismatic Society* 198, 12–14.
Schindel, N. 2011. 'The era of the Bactrian documents: a reassessment', *Gandhāran Studies* 5, 1–10.
Schindel, N. 2012. 'The beginning of Kushano-Sasanian coinage', in Alram and Gyselen 2012, 65–73.
Schindel, N. 2014. 'Ardashir 1 Kushanshah and Vasudeva the Kushan: Numismatic evidence for the date of the Kushan king Kaniṣka I', *Journal of the Oriental Numismatic Society* 220, 27–30.
Schindel, N. 2016. 'Kushanshahs ii. Kushano-Sasanian Coinage', *Encyclopædia Iranica*, online edition, http://www.iranicaonline.org/articles/kushanshahs-02-coinage.
Schlumberger, D., Le Berre, M. and Fussman, G. 1983. *Surkh Kotal en Bactriane*, vol. 1, *Les temples: architecture, sculpture, inscriptions* (*Mémoires de la Délégation Archéologique Française en Afghanistan* 25), Paris.
Schoff, W.H. 1914. *Parthian Stations by Isidore of Charax*: *The Greek Text, with a Translation and Commentary*, Philadelphia.
Schollaardt, C. 2011. 'The international numismatic community and the role of the British Museum: past, present and future', in Cook 2011, 14–16.
Schopen, G. 1987. 'The inscription on the Kuṣān image of Amitābha and the character of the early Mahāyāna in India', *Journal of the International Association of Buddhist Studies* 10(2), 99–137.
Schopen, G. 1997. *Bones, Stones and Buddhist Monks: Collected Papers on the Archaeology, Epigraphy and Texts of Monastic Buddhism in India*, Honolulu.
Schopen, G. 2004. *Buddhist Monks and Business Matters: Still More Papers on Monastic Buddhism in India*, Honolulu.
Schopen, G. 2005. *Figments and Fragments of Mahayana Buddhism in India: More Collected Papers*, Honolulu.
Schopen, G. 2014. *Buddhist Nuns, Monks, and Other Worldly Matters: Recent Papers on Monastic Buddhism in India*, Honolulu.
Schuessler, A. 2009. *Minimal Old Chinese and Later Han Chinese: A Companion to Grammata Serica Recensa*, Honolulu.
Schweizer, F. 1973. 'Reconciliation of the specific gravity and 'Milliprobe' X-ray fluorescent method for the analysis of gold coins', *Archaeometry* 15(2): 188–92.
Scott, D.A. 2007. 'Manichaeism in Bactria', *Journal of Asian History* 41, 107–30.
Sellwood, D. 1980. *An Introduction to the Coinage of Parthia*, second edition, London.
Senior, R.C. 1999. *The Coinage of Hermaios and its Imitations Struck by the Scythians*, Butleigh, Somerset.
Senior, R.C. 2001 and 2006. *Indo-Scythian Coins and History*, London (vols 1–3 2001; vol. 4 2006).
Senior, R and Babar, R. 1998. 'A new king and a new deity', *Journal of the Oriental Numismatic Society* 157, 13.
Shah, M.A. 2012–13. 'Early historic archaeology in Kashmir: and appraisal of the Kushan period', *Bulletin of the Deccan College Research Institute* 72–3, 213–24.
Shamasastra, R. 1925. 'The era of Vikramaditya and the dynasty of Gardabhilas and of Murundas', *The Journal of the Royal Asiatic Society of Great Britain and Ireland* 1925(1), 81–6.
Sharma, G.R. 1960. *The Excavations at Kauśāmbī 1957–59*, Allahabad.
Sharma, G.R. 1980. *Reh Inscription of Menander and the Indo-Greek Invasion of the Ganga Valley*, Allahabad.
Sharma, R.C. 1995. *Buddhist Art: Mathura School*, New Delhi.
Sharma, S. 1999. *Gold Coins of Imperial Kushāṇas and their Successors in the Bharat Kala Bhavan*, Varanasi.
Sharma, R.S. 2001. *Early Medieval Indian Society*: *A Study in Feudalisation*, Kolkata.
Sharma, S. 2012. 'Recent discovery of copper coin hoard of Kushan period from Basani, Varanasi', in Jayaswal 2012, 57–76.
Shastri, A.M. 1979. *Kausambi Hoard of Magha Coins*, Nagpur.
Shastri, H.G. 1981–4. 'Pandit Bhagvanlal Indraji's contribution to history and archaeology (with special reference to Gujarat)', *Journal of the Asiatic Society of Bombay* 56–9, 1–6.
Shenkar, M. 2014. *Intangible Spirits and Graven Images: The Iconography of Deities in the pre-Islamic Iranian World*, Leiden.
Shenkar, M. 2017. 'Royal regalia and the "divine kingship" in the pre-Islamic Central Asia', *Parthica* 19, 5–74.
Shrava, S. 1993. *The Dated Kushāṇa Inscriptions*. New Delhi.
Shrimali, K.M. 1983. *History of Pañcāla*, New Delhi, 2 volumes.
Simonetta, A. 1957. 'An essay on the so called "Indo-Greek" coinage', *East and West* 8(1), 44–66.
Simonetta, A.M. and Widemann, F. 1978. 'The chronology of the Gondopharean dynasty', *East and West*, 28(1), 155–87.
Simpson, W. 1879. 'Letter to Colonel Colley regarding coins from the Ahin Posh Tope near Jelalabad', *Proceedings of the Asiatic Society of Bengal* 48, 77–9.
Sims-Williams, N. 1989a–92. *Sogdian and other Iranian Inscriptions of the Upper Indus* I and II, *Corpus Inscriptionum Iranicarum* II/III, London, 1989 and 1992.
Sims-Williams, N. 1989b. 'Bactrian', in R. Schmitt (ed.), *Compendium Linguarum Iranicarum*, Wiesbaden, 230–5.
Sims-Williams, N. 1996. 'Nouveaux documents sur l'histoire et la langue de la Bactriane', *Comptes Rendus des Séances de l'Académie des Inscriptions et Belles-Lettres* 140(2), 633–54.
Sims-Williams, N. 1998. 'Further notes on the Bactrian inscription of Rabatak, with an appendix on the names of Kujula Kadphises and Vima Taktu in Chinese', in N. Sims-Williams (ed.), *Proceedings of the Third European Conference of Iranian Studies* I: *Old and Middle Iranian Studies*, Wiesbaden, 79–92.
Sims-Williams, N. 2002. 'Ancient Afghanistan and its invaders: linguistic evidence from the Bactrian documents and inscriptions', in N. Sims-Williams (ed.), *Indo-Iranian Languages and Peoples*, Oxford: 225–42.
Sims-Williams, N. 2004. 'The Bactrian inscription of Rabatak: a new reading', *Bulletin of the Asia Institute* 18, 53–68.
Sims-Williams, N. 2007. *Bactrian Documents from Northern Afghanistan* II, London.
Sims-Williams, N. 2008. 'The Sasanians in the East, a Bactrian archive from northern Afghanistan', in V.S. Curtis and S. Stewart (eds), *The Idea of Iran*, vol. 3, *The Sasanian Era*, London, 88–102.
Sims-Williams, N. 2012a. *Bactrian Documents from Northern Afghanistan* I, revised edition, London.
Sims-Williams, N. 2012b. *Bactrian Documents from Northern Afghanistan* III, London, plates.

Sims-Williams, N. 2012c. 'Bactrian historical inscriptions of the Kushan period', *Silk Road* 10, 76–80.

Sims-Williams, N. 2013. 'The Lord's Vihāra at Kara-Tepe', in *Труды Государственного Эрмитажа* 62 (Согдийцы, их Предшественники, Современники и Наследники), [*Trudy Gosudarstvennogo Ermitazha* 62 (*Sogdiytsy, ikh Predshestvenniki, Sovremenniki i Nasledniki*); *Transactions of the State Hermitage Museum* 62 (*Sogdians, the Precursors, Contemporaries and Heirs*)], 77–81.

Sims-Williams, N. 2015. 'A new Bactrian inscription from the time of Kanishka', in Falk 2015a, 255–64.

Sims-Williams, N. and Cribb, J. 1995–6. 'A new Bactrian inscription of Kanishka the Great', *Silk Road Art and Archaeology* 4, 75–142.

Sims-Williams, N. and de Blois, F. 2018. *Studies in the Chronology of the Bactrian Documents from Northern Afghanistan*, Vienna.

Sims-Williams, N. and Tucker, E. 2005. 'Avestan huuōišta and its cognates', in G. Schweiger (ed.), *Indogermanica: Festschrift Gert Klingenschmitt indische, iranische und indogermanische Studien dem verehrten Jubilar dargebracht zu seinem fünfundsechzigsten Geburtstag*, Taimering, 587–604.

Sims-Williams, U. 2012[2004]. 'Hoernle, Augustus Frederic Rudolf', *Encyclopedia Iranica*, online edition, http://www.iranicaonline.org/articles/hoernle-augustus-frederic-rudolf.

Singh, S.P. 1973. 'Numismatic evidence of Kushana-Murunda rule in Eastern India', *Journal of the Numismatic Society of India* 35, 127–41.

Singh, S.P. 1985. 'Early Indian coins discovered from Basadha (Bihar)', *Journal of the Numismatic Society of India* 47, 18–21.

Singh, U. 2004. *The Discovery of Ancient India: Early Archaeologists and the Beginnings of Archaeology*, Delhi.

Singh, U. 2008. *A History of Ancient and Early Medieval India: From the Stone Age to the 12th Century*, Delhi.

Singh, J. 2013. 'Ancient Republic states: study of downfall theories', *Journal of Inter-Disciplinary Research and Analysis* 2(2), 81–7.

Sinisi, F. 2015. 'The deities on the Kushano-Sasanian coins', *Electrum* 22, 201–25.

Sinisi, F. 2017. 'Royal imagery on Kushan coins: local tradition and Arsacid influences', *Journal of the Economic and Social History of the Orient* 60, 818–927.

Sinor, D. 1990. 'The establishment and dissolution of the Turk empire', in D. Sinor (ed.), *The Cambridge History of Early Inner Asia: From Earliest Times to the Rise of the Mongols*, vol. 1, Cambridge, 285–316.

Sircar, D.C. 1951a. 'The Kushāṇas', in Majumdar 1951, 136–53.

Sircar, D.C. 1951b. 'The Śaka satraps of western India', in Majumdar 1951, 178–89.

Sircar, D.C. 1961–2. 'Brahmi inscriptions from Mathura', *Epigraphia Indica* 34, 9–11.

Sirisena, O.M.R. 2002. *Medieval Gold Coins of Sri Lanka (700–1100)*, Colombo.

Skinner, M. 2017. *Marks of Empire: Extracting a Narrative from the Corpus of Kusāna Inscriptions*, PhD thesis, University of Washington, Seattle, https://digital.lib.washington.edu/researchworks/handle/1773/39790.

Skjærvø, P. 2003. 'Palaeography', in Alram and Gyselen 2003, 46–69.

Skjærvø, P.O. (and Humbach, H.) 1983. *The Sassanian Inscription of Paikuli*, Wiesbaden.

Smagur, E. 2016. 'Kushan coins in the Department of Coins and Medals, The National Museum in Warsaw', *Journal of the Oriental Numismatic Society* 226, 15–17.

Smith, V.A. 1898. 'Numismatic notes and novelties, no. III – ancient and medieval India', *Journal of the Asiatic Society of Bengal* 67(1), 130–40.

Smith, V.A. 1900. 'The Buddhist monastery at Sohnāg in the Gorakhpur District', *Journal of the Royal Asiatic Society*, 431–7.

Smith, V. 1902. 'Vaisali', *Journal of the Royal Asiatic Society*, 267–88.

Smith, V.A. 1903. 'The Kushān, or Indo-Scythian, period of Indian history, BC 165 to AD 320', *Journal of the Royal Asiatic Society*, 1–64.

Smith, V.A. 1904. *The Early History of India: From 600 BC to the Muhammadan Conquest, Including the Invasion of Alexander the Great*, Oxford.

Smith, V.A. 1906. *Coins of Ancient India: Catalogue of the Coins in the Indian Museum Calcutta – Including the Cabinet of the Asiatic Society of Bengal*, vol. 1, Calcutta.

Smith, V.A. 1907. 'White Hun (Ephthalite) coins from the Panjab' *Journal of the Royal Asiatic Society*, 91–7.

Sprengling, M. 1953. *Third Century Iran: Sapor and Kartir*, Chicago.

Srinivasan, D. (ed.) 1988. *Mathurā: The Cultural Heritage*, New Delhi.

Srivastava, H.L. 1934. 'Excavations at Theh Polar, District Karnal', *Annual Reports Archaeological Survey of India* 1930–34, 142–5.

Srivastava, A.K. 1980. *Coin Hoards of Uttar Pradesh*, Lucknow.

Srivastava, A.K. 1988. 'Treasure trove finds from Mathura', in D. Srinavasan (ed.), *Mathura*, New Delhi, 119–23.

Staviskii, B.Y. 1977. *Kushanskaya Baktriya – problemy istorii i kul'tury* [Kushan Bactria, problems, history and culture], Moscow.

Staviskii, B.Y. 1986. *La Bactriane sous les Koushans, problèmes d'histoire et de culture*, Paris.

Staviskii, B.Y., Vainberg, B.I., Gorbunova, N.G. and Novgorodova, E.A. 1968. *Sovetskay arkheologiya sredney asii i kushanskaya problema* [*Soviet Central Asian Archaeology and the Kushan Problem: An Annotated Bibliography*], Moscow.

Stein, M.A. 1887. *Zoroastrian Deities on Indo-Scythian Coins*, London.

Stein, M.A. 1900. *Kalahana's Rājataraṅginī: A Chronicle of the Kings of Kashmir*, Westminster, 3 volumes.

Stein, M.A. 1907. *Ancient Khotan: Detailed Report of Archaeological Explorations in Chinese Turkestan*, Oxford.

Stein M.A. 1921. *Serindia: Detailed Report of Explorations in Central Asia and Westernmost China*, Oxford.

Stein, M.A. 1928. *Innermost Asia: Detailed Report of Explorations in Central Asia, Kansu and Eastern Iran*, Oxford.

Stein, M.A. 1937. *Archaeological Reconnaissances in North-Western Indian and South-Eastern Iran*, London.

Stevenson, E.L. (trans.) 1932. *Geography of Claudius Ptolemy*, New York.

Strauch, I. 2011. 'The character of the Indian Kharoṣṭhī script and the "Sanskrit Revolution": a writing system between identity and assimilation', in A. de Voogt and J.F. Quack (eds), *The Idea of Writing*, vol. 2, *Writing Across Borders*, 131–68.

Strauch, I. 2012. *Foreign Sailors on Socotra: The inscriptions and drawings from the cave Hoq*, Bremen.

Stroeters, N., Diefenbach, A. and Benvenuto, M.A. 2012. 'Energy dispersive X-ray fluorescence (EDXRF) of a series of copper-based coins of the Kushan emperor Kujula Kadphises', *American Chemical Society abstracts, 243rd ACS National Meeting, San Diego CA, March 25–29, 2012*.

Stroeters, N. and LaBond, J.L. 2013. 'Energy dispersive X-ray fluorescence analysis of sets of coins of the Kushan Empire, revolutionary France, and the state of Mysore: Three case studies', *American Chemical Society abstracts*, summarised in S.C. Rasmussen, *American Chemical Society: Division of the History of Chemistry, Program and Abstracts, 245th ACS National Meeting, New Orleans, April 7–11, 2013*, 19.

Stronge, S. 1993. 'Colonel Guthrie's collection: jades of the Mughal era', *Oriental Art* 39 (4), 5–13.

Sundermann, W. 1986. 'Mani, India and the Manichaean religion', *South Asian Studies* 2, 11–19.

Sundermann, W. 2009a. 'Mani', *Encyclopædia Iranica*, online edition, http://www.iranicaonline.org/articles/mani-founder-manicheism.

Sundermann, W. 2009b. 'Manicheism v. missionary activity and technique', *Encyclopædia Iranica*, online edition, http://www.iranicaonline.org/articles/manicheism-v-missionary-activity-and-technique-.

Sutherland, C.H.V. 1984. *Roman Imperial Coinage*, vol. 1, *Augustus–Vitellius (31 BC–69 AD)*, revised edition, London.

Sydenham, E.A. 1941. 'Presidential address', *Proceedings of the Royal Numismatic Society*, 9–20.

Taasob, R. 2016. *Early Kushan Coinage in the Context of Exchanges and Contacts across the Indo-Iranian Borderlands*, D.Phil. thesis, University of Vienna.

Taasob, R. 2019. 'Heraios coinage and Khalchayan, attribution and chronology: revisited', https://www.academia.edu/39411324/Heraios_Coinage_and_Khalchayan_Attribution_and_Chronology_Revisited.

Taisho edition (BDK Tripitaka) https://bdkamerica.org/tripitaka-list/.

Talbot, M.G., Maitland, P.J. and Simpson, W. 1886. 'The rock-cut caves and statues of Bamian', *Journal of the Royal Asiatic Society* New Series 18(3), 323–50.

Tanabe, K. 1983. 'Kushan-zoku no seidō-sei enkei kazari kanagu', *Nihon-Oriento-Gakkai-geppō* (Bulletin of the Society for Near Eastern Studies in Japan) 26(2), 119–30. (English version 'Kushan bronze medallions from Japanese collections', *Bulletin of the Ancient Orient Museum* 5, 83–103, pls I–II).

Tanabe, K. 1987. 'Kushan bronze medallions restated', *Bulletin of the Ancient Orient Museum* 9, 37–43, pls II and IV.

Tanabe, K. 1989. 'A discussion of one Kushano-Sasanian silver plate and relation to Gandharan art', *Orient* 25, 51–80.

Tanabe, K. 1991–2. 'OHÞO: another Kushan wind god', *Silk Road Art and Archaeology* 2, 52–71.

Tanabe, K. 1993. *Silk Road Coins: The Hirayama Collection*, Kamakura.

Tanabe, K. 1997a. '*Shiva* has "Gone with the wind" – OHÞO =Vayu restated', *Al-Rāfidān* 18, 263–80.

Tanabe, K. 1997b. 'The Kushano-Sasanian kings hidden in Roman and Chinese literary sources', in K. Tanabe, J. Cribb and H. Wang (eds), *Studies in Silk Road Coins and Culture: Papers in Honour of Professor Ikuo Hirayama on his 65th Birthday*, Kamakura, 75–88.

Tanabe, K. 2008. 'Not the Buddha but Hercules on the gold token from Tillya Tepe: a review of the relevant legends and images', in C. Bautze-Picron (ed.), *Religion and Art: New Issues in Indian Iconography and Iconology*, London, 33–48.

Tandon, B.N. 1967. 'Micro-chemical analysis, emission-spectography and metallographic examination of four ancient metal samples', *Studies in Museology* 3, 45–50.

Tandon, P. 2006. 'New light on the Pāratarājas', *Numismatic Chronicle* 166, 173–209.

Tandon, P. 2009a. 'Further light on the Pāratarājas: an absolute chronology of the Brāhmī and Kharoṣṭhī series', *Numismatic Chronicle* 169, 137–71.

Tandon, P. 2009b. 'The Western Kshatrapa Dāmazāda', *Numismatic Chronicle* 169, 173–87.

Tandon, P. 2010. 'The coins of the Pāratarājas: a synthesis', *Journal of the Oriental Numismatic Society*, Supplement to 205 (Autumn 2010), 15–31.

Tandon, P. 2011. 'The crowns of Kanishka's bronze coins and some additional Shiva images on Kushan coins', in S. Bhandare and S. Garg (eds), *Felicitas: Essays in Numismatics, Epigraphy and History in Honour of Joe Cribb*, Mumbai, 387–99.

Tandon, P. 2012. 'The location and kings of Paradan', *Studia Iranica* 41(1), 25–56.

Tandon, P. 2013. 'Horseman coins of Candragupta III', *Numismatic Chronicle* 173, 171–85.

Tandon, P. 2014. 'The coins of Purugupta', *Numismatic Digest* 38, 88–117.

Tandon, P. 2015. 'The identity of Prakāśāditya', *Journal of the Royal Asiatic Society* 25(4), 647–68.

Tanner, B.K., MacDowall, D.W., MacCormack, I.B. and Smith, R.L. 1979. 'Ferromagnetism in ancient copper-based coinage', *Nature* 280, 46–8.

Tarn, W.W. 1951. *The Greeks in Bactria and India*, second edition, Cambridge.

Thapar, R. 2002. *The Penguin History of Early India from the Origins to AD 1300*, London.

Thaplyal, K.K. 2014. 'Northern states and dynasties c. AD 300–600', in Chakrabarti and Makkhan Lal 2014, 164–91.

Thierry, F. 2005. 'Yuezhi et Kouchans, pièges et dangers des sources chinoises', in O. Bopearachchi and M.-F. Boussac (eds), *Afghanistan, Ancien carrefour entre l'est et l'ouest*, Turnhout, 421–539.

Thomas, E. 1858. *Essays on Indian Antiquities, Historic, Numismatic, and Palaeographic of the Late James Prinsep, F.R.S, Secretary to the Asiatic Society of Bengal; to which are Added his Useful Tables Illustrative of Indian History, Chronology, Modern Coinages, Weight Measures, etc.*, London, 2 volumes.

Thomas, E. 1871. *The Chronicles of the Pathan Kings of Delhi, Illustrated by Coins, Inscriptions, and Other Antiquarian Remains*, London.

Thomas, F.W. 1903. 'Mātṛiceṭa and the Mahārājakanikalekha', *Indian Antiquary* 32, 345–60.

Thomas, F.W. 1913. 'The date of Kanishka', *Journal of the Royal Asiatic Society* 1913, 627–50.

Thomson, R.W. (trans.) 1982. *History of Vardan and the Armenian War by Elishe*, Cambridge, MA.

Thomson, R.W. (trans.) 2007. *Moses Khorenats`i. History of the Armenians*, revised edition, Cambridge, MA.

Thomson, R.W., Howard-Johnston, J. and Greenwood, T. 1999. *Armenian History attributed to Sebeos*, Part 1*: Translation and Notes*, Liverpool.

Tolstov, S.P. 1968. 'Documents from the Toprak-Kala Palace, and the problem of the Śaka era and the Kaniṣka era', in Basham 1968, 304–26.

Toynbee, A. 1976. *Mankind and Mother Earth*, Oxford.

Tremblay, X. 2001. *Pour une histoire de la Sérinde. Le manichéisme parmi les peuples et religions d'Asie Centrale d'après les sources primaires*, Vienna

Tripathy, S. 1986. *Early and Medieval Coins and Currency System of Orissa, c. 300 BC to 1568 AD*, Calcutta.

Trivedi, H.V. 1957. *Catalogue of the Coins of the Nāga Kings of Padmāvatī*, Gwalior.

Tucci, G. 1977. 'On Swāt – the Dards and connected problems', *East and West* 27(1/4), 9–103.

Turgunov, B.A., Livšic, V.A. and Rtveladze, E.V. 1981. 'Otkrytie baktrijskoj monumental'noj nadpisi v Ajrtame', *Obščestvennye nauki v Uzbekistane* 3, 38–48.

Turner, P. 1989. *Roman Coins from India*, London.

Turner, P.J. and Cribb, J. 1996. 'Numismatic evidence for the Roman trade with India', in J. Reade (ed.), *The Indian Ocean in Antiquity*, London, 309–19.

Tye, R. 2009. *Early World Coins and Early Weight Standards*, York.

Tye, R. and Tye, M. 1995 *Jitals. A Catalogue and Account of the Coin Denomination of Daily Use in Medieval Afghanistan and North West India*, South Uist.

Tyler-Smith, S. 1997. 'Kushano-Sasanian – small Bactrian copper coins: some refinements', *Oriental Numismatic Society Newsletter* 151, 5–7.

Tyler-Smith, S. 2012. 'Review: *Numismatic Art of Persia. The Sunrise Collection*. Part 1: *Ancient – 650 BC to AD 650* by Bradley R. Nelson', *Numismatic Chronicle* 172, 377–86.

Tzohoar, R. 2019. 'Reading Aśvaghoṣa across boundaries: an introduction', *Journal of Indian Philosophy* 47(2), 187–94.

Ulving, T. 1997. *Dictionary of Old and Middle Chinese: Bernhard Karlgren's Grammata Serica Recensa Alphabetically Arranged*, Gothenburg.

ur Rahman, A. and Falk, H. 2011. *Seals, Sealings and Tokens from Gandhāra*, Wiesbaden.

ur Rahman, A., Grenet, F. and Sims-Williams, N. 2006. 'A Hunnish Kushan-shah', *Journal of Inner Asian Art and Archaeology* 1, 125–31.

Vainberg, B.I. 1977. *Monety drevnego Khorezma* [Coins of ancient Chorasmia], Moscow.

Vainberg, B.I. 2005. 'Chorasmian coinage', *Encyclopædia Iranica*, online edition, http://www.iranicaonline.org/articles/chorasmian-coinage.

van Lohuizen-de Leeuw, J.E. 1949. *The 'Scythian' Period, an Approach to the History, Art, Epigraphy and Palaeography of North India from the 1st Century BC to the 3rd Century AD*, Leiden.

van Lohuizen-de Leeuw, J.E. 1979. 'New evidence with regard to the origin of the Buddha image', in H. Härtel (ed.), *South Asian Archaeology*, Berlin, 377–400.

van Lohuizen-de Leeuw, J.E. 1986. 'The second century of the Kaniska era', *South Asian Studies* 2, 1–9.

Verardi, G. 1992. *Excavation at Hadigaon, Kathmandu*, Rome.

Vogel, J.P. 1905–6. 'Epigraphical discoveries at Sārnāth', *Epigraphia Indica* 8, 166–79.

Vogel, J.P. 1909. *The Mathura School of Sculpture*, Calcutta.

Vondrovec, K. 2014. *Coinage of the Iranian Huns and Their Successors from Bactria and Gandhara: 4th to 8th Century CE*, Vienna.

Voynikov, Z. 2018. *Who Are the Ancient Bulgarians or Protobulgarians?* https://www.academia.edu/36049920/WHO_ARE_THE_ANCIENT_BULGARIANS_OR_PROTOBULGARIANS_AUTHOR_ZHIVKO_VOYNIKOV_BULGARIA.

Wagoner, P.B. and Tandon, P. 2018. 'The Bahmani "currency reform" of the early fifteenth century in light of the Akola Hoard', *American Journal of Numismatics* 29 (for 2017), 227–68.

Walburg, R. 2008. *Coins and Tokens from Ancient Ceylon*, Wiesbaden.

Waller, D. 1990. *The Pundits: British Exploration of Tibet and Central Asia*, Lexington.

Walser, J. 2005. *Nagarjuna in Context: Mahayana Buddhism and Early Indian Culture*, New York.

Wan Xiang. 2012. 'A study on the Kidarites: reexamination of documentary sources', *Archivum Eurasiae Medii Aevi* 19, 243–301.

Wang, H. 2004. *Money on the Silk Road – The Evidence from Eastern Central Asia to AD 800*, London.

Wang, H. 2011. 'Famous and not-so-famous people associated with the Royal Asiatic Society', in S. Bhandare and S. Garg (eds), *Felicitas. Essays in Numismatics, Epigraphy and History in Honour of Joe Cribb*, Mumbai, 413–89.

Wang, H. and Perkins, J. (eds) 2008. *Handbook to the Collections of Sir Aurel Stein in the UK*, London.

Wang Yue, Du Weishan and Chen Xiejan, 2006. *Shanghai Bowuguan Zang Sizhou zhi Lu Gudai Guojia Qianbi – Shanghai Museum's Collection of Ancient Coins from the Silk Road*, Shanghai.

Warmington, E.H. 1928. *The Commerce between the Roman Empire and India*, London.

Watson, B. (trans.) 1971. *Records of the Grand Historian of China: Translated from the Shih Chi of Ssu-Ma Ch'ien*, vol. 2, Taibei.

Wei Lanhai, Li Hui and Xu Wenkan. 2015. 'The separate origins of the Tocharians and the Yuezhi: results from recent advances in archaeology and genetics', in M. Malzahn, M. Peyrot, H. Fellner and T.-S. Illés (eds), *Tocharian Texts in Context, International Conference on Tocharian Manuscripts and Silk Road Culture, Vienna June 26–28, 2013*, Vienna, 277–99.

Westgarth, M. 2009 *A Biographical Dictionary of Nineteenth Century Antique and Curiosity Dealers*, Preston.

Whitehead, D. 1999. 'From Smyrna to Stewartstown: a numismatist's epigraphic notebook', *Proceedings of the Royal Irish Academy*. Section C: *Archaeology, Celtic Studies, History, Linguistics, Literature*, 99C.3, 73–113.

Whitehead, R.B. 1914. *Catalogue of Coins in the Panjab Museum*, Lahore and Oxford.

Whitehead, R.B. 1917. 'Report on the working of the Treasure Trove Act as regards the acquisition of old coins in the Punjab for the year 1915–16', in *Report on the Working of the Central Museum, Lahore, for 1916–17*, Lahore, 12 and pl. 3.

Whitfield, S. 2018. *Silk, Slaves, and Stupas: Material Culture of the Silk Road*, Oakland, CA.

Widemann, F. 2009. *Les successeurs d'Alexandre en Asie centrale et leur héritage culturel – essai*, Paris.

Willemen, C. 2012. 'Kaniṣka and the Sarvāstivāda Synod', in V. Jayaswal (ed.), *Glory of the Kushans: Recent Discoveries and Interpretations*, New Delhi, 218–22.

Willis, M. 1997 'Sculpture from India', in M.L. Caygill and J.F. Cherry (eds), *A.W. Franks: Nineteenth Century Collecting and the British Museum*, London, 250–61.

Willis, M. 1999–2000. 'The Sānchī Bodhisattva dated Kuṣāṇa year 28', *Silk Road Art and Archaeology* 6, 269–73.

Willis, M. 2005. 'Late Gupta history: inscriptions, coins and historical ideology', *Journal of the Royal Asiatic Society* 15(2), 131–50.

Wilson, D.M. 2002. *The British Museum: A History*, London.

Wilson, H.H. 1841. *Ariana Antiqua: A Descriptive Account of the Antiquities and Coins of Afghanistan with a Memoir on the Buildings Called Topes by C. Masson*, London

Wright, H.N. 1907. *Catalogue of the Coins in the Indian Museum, Calcutta, including the Cabinet of the Asiatic Society of Bengal*, vol. II, *The Sultans of Delhi and Contemporary Dynasties in India*, vol. III *Mughal Emperors of India*, Oxford.

Yardley, J.C. (trans.) 1994. *Justin Epitome of the Philippic History of Pompeius Trogus*, Atlanta.

Yate, A.C. 1900. *Lieutenant-Colonel John Haughton, Commandant of the 36th Sikhs – A Hero of Tirah – A Memoir*, London.

Yatsenko, S.A. 2012. 'Yuezhi on Bactrian embroidery from textiles found at Noyon Uul, Mongolia', *The Silk Road* 10, 39–48.

Young, S.H. 2002. *Biography of the Bodhisattva Aśvaghoṣa – Maming pusa zhuan*, http://ccbs.ntu.edu.tw/FULLTEXT/JR-AN/103180.htm.

Yu Taishan. 2011. *The Origin of the Kushans* (*Sino-Platonic Papers* 212), Philadelphia.

Yu Taishan. 2014. *A Concise Commentary on* Memoirs on the Western Region *in the Official Histories of the Western and Eastern Han, Wei, Jin, and Southern and Northern Dynasties*, Beijing.

Zavyalov, V.A. 1979a. 'Raskopki kvartala pozdnekušanskogo vremeni

na gorodišče Zar-Tepe v 1975–1976 gg', *Sovetskaya Archeologia* 3, 141–54.

Zavyalov, V.A. 1979b. 'Кушанский медальон с изображением Хувишки' ['Kushanskii medalion s izobrajeniem Huvishki'], *Uspekhi Sredneaziatskoi Arkheologii* 4, 86–7.

Zeymal, E.V. 1967. 'Monety Velikikh Kushan v sobranii Gosudarstvennogo Ermitazha' ['Coins of the Great Kushan at the State Hermitage Museum'], *Trudy Gosudarstvennogo Ermitazha* 9, *Numizmatika* 3, 55–86.

Zeymal, E.V. 1968. Кушанская Хронология – Материалы по Провлеме [*Kushanskaya Khronologiya – Materialy po Provleme*; *Kushan Chronology, Review of Data Bearing on the Problem*], Moscow.

Zeymal, E.V. 1970. '278 AD – the date of Kanishka', in Kushan Studies in U.S.S.R.' in B. Gafuroy [and others], *Papers presented by the Soviet scholars at the UNESCO Conference on History, Archaeology, and Culture of Central Asia in the Kushan Period, Dushanbe, 1968*, Calcutta, 152–5.

Zeymal, E.V. 1978. 'Политическая история древней Трансоксианы по нумизматическим данным', in *Культура Востока: Древность и раннее средневековье*. Л, ['Politicheskaīa istoriīa Transoksiany po numizmaticheskim dannym', in V.G. Lukonin (ed.), *Kul'tura Vostoka. Drevnost' i rannee srednevekov'e*], 192–214.

Zeymal, E.V. 1983. *Drevnie monety Tadzhikistan*, Dushanbe.

Zeymal, E.V. 1996a. 'Münzen von der Seidenstraβe', in W. Seipel (ed.), *Weihrauch und Seide. Alte Kulturen an der Seidenstraβe*, Vienna, 358–80.

Zeymal, E.V. 1996b. 'The Kidarite kingdom in Central Asia', in B.A. Litvinsky (ed.) *History of Civilizations of Central Asia*, vol. 3, Paris, 123–37.

Zeymal, E.V. 1997a. 'Visha-Shiva in the Kushan pantheon', in R. Allchin, B. Allchin, N. Kreitmand and E. Errington (eds), *Gandharan Art in Context*, New Delhi, 243–66.

Zeymal, E.V. 1997b. 'Coins from the excavations of Takht-i Sangin (1976–1991)', in K. Tanabe, J. Cribb and H. Wang (eds), *Studies in Silk Road Coins and Culture: Papers in Honour of Professor Ikuo Hirayama on his 65th Birthday*, Kamakura, 89–111.

Zeymal, E.V. 1999. 'Tillya-Tepe within the context of the Kushan chronology', in Alram and Klimburg-Salter 1999, 239–44.

Zhang Defang. 2004. 'Xuanquan Han jianzhong ruogan xicheng ziliao kaolun' [Research notes on the data concerning western cities in the Han period bamboo tallies from Xuanquan], in Rong Xinjiang and Li Xiaocong (eds), *Zhongwai Guanxi Shi* [History of Chinese–Foreign Relations], Beijing, 129–47.

Zhou Ti. 2018. *Hanqu Erti Qian (Hetian Maqian) Xintan* [A New Investigation of the Sino-Kharoṣṭhī Coins (Khotan Horse Coins)], Shijiazhuang (Hebei).

Zürcher, E. 1968. 'The Yüeh-Chi and Kaniska in the Chinese sources', in Basham 1968, 346–90.

Zwalf, W. 1996. *A Catalogue of the Gandhara Sculpture in the British Museum*, London, 2 volumes.

Index

Numbers in *italic* denote pages with figures and captions, those in **bold**, tables.

academic knowledge 8, 14, 18
Achyuta (king of Panchala) 108–9, *109*
Adomano (Hephthalite king of the East, *c.* AD 500–20) **21**, 129, *130*, 132, 135, 269, *270–1*, 271
Adulis 92, 93
Afghanistan 273, 277–8
  see also Balkh; Begram; Kabul; Surkh Kotal; Tepe Maranjan hoard
Ahamad, R. 10
Ahicchatra *53*, 109
Ahuramazda (god) 66, **85**, 86, 118, **191**
Akhun Dheri hoard *72*, 102–3, 112
Akra imitation coins 153, *154–5*, 155–6, 158
Album, Steve 294
Alchon Hun coins 124, 129, *130*, 132, 269, *270–1*, 271
Alchon Huns 122, 123, 129
  see also Khingila; Mihirakula; Toramana
Alexandridis, Annetta 10
Allahabad inscription 96, 99, 104, 105, 108, *109*, 138, 230
Allan, John 275, 291
Allon, M. 50, 51
Alram, M. 122, 246
American Numismatic Society 3, **4**
Ammianus Marcellinus (Roman historian) 30, 113–14
Anahita (goddess) *97*, 110, 119, 121, *246*, 247, *256*, 257
Anemos (god) 66, **175**, 177, 178, **178**
animal images *see* bulls; camels; elephants; lion, goddess on
anonymous acquisitions 279, 288, 292, 294, 295, 296
antiquities exports 288–9
Antoninus Pius (Roman emperor, AD 138–61) 68, 71
Ara inscription 89, 93, 101, 102
Arabic documents 124, 125
Arachosia *see* Kandahar
archaeological dates 17
archaeology and numismatics 6, 15
Ardashir I (Sasanian emperor, *c.* AD 223–40)
  Indo-Parthian kingdom and 41
  kings appointed by 245
  minting activity and 215, 219, 246
  silver drachm 88, *88*
  Vasishka and 97
Ardashir I (Kushano-Sasanian ruler, *c.* AD 230–5) **21**, 110, **117**, **120**
  coins 246–7, *246*
Ardashir II (Kushano-Sasanian ruler, *c.* AD 235–45) **21**, 110, **117**, **120**, **131**
  coins *246–7*, 247–9
Ardochsho (goddess)
  Kidarite Hun coins
    Kidara 238, *240–1*
    Peroz 238
  Kushan coins
    imagery of 47, 66, *67*, 84, **84–5**
    imitation coins 183, *184*, *235*
    Kanishka I *174*, **178**, *181*
    Kanishka II 96, 215, 217, *218–19*

Kanishka III 102, 224, *224*
Kipunadha 233, *234*
late kings Mahi, Shaka, Kipunadha and Meśra 107, 229, *229*, 230, *231*, 233
Vasishka 220, *221*, 223, 224
Vasudeva II *225–6*, 226, 227, 228, *228*
Kushano-Sasanian coins 122, *250*, 251
Armenian histories 88, 92, 97, 114, 128
Armitage, T.W. 292
Arshtat (god) *see* Rishti
Arsi 27
Arthaśāstra 16
Aryan 29, 55
Ashaeichsho (god) **85**, *189*, **191**, 193
Ashtat (ruler of the Sogdian city state of Nakhshab) 42, *42*
Asiani 30
Asiatic Society of Bengal 5, 288
Aspavarma (general of the Apracaraja kingdom) 40, *41*
Aśvaghoṣa 62–3
Athsho (god) 66, **84–5**, **175**, 177–8, **178**, 179, *181*, **191**, *196*, 198
Attic weight standard 142, 144, 145, *146*, 153, 158, 160, 163, 164, 166, *169*, 170, 172
Audumbaras 47, *47*
Augustus (Roman emperor, 27 BC–AD14), silver denarius 36, *36*, *152*
Aurelian 103
Axum *39*, 92, *93*
Ayodhya *see* Saketa
Ayrtam inscription 83
Azes I (Indo-Scythian king) 35
Azes II (Indo-Scythian king)
copper coin *152*
imitation coins 153, *154–5*, 155, 158
Taxila finds 140
Azes era **21**, 22, 34
Azes era inscriptions 33, 34, **35**, 36
Aziz Dheri hoard *72*, 112

Babar, Riaz 295
Bactria 27–8, *27*, 29, 30, 32, 103
see also Kara-Tepe
Bactria/Tokharistan 88, 92, 93, 100, 113, 123–4, 128
Kushano-Sasanian imitations 213, *213*
Soter Megas coins 161, *161*, 163
see also Tokharistan
Bactrian 13, 29, 55
Bactrian documents 106, 110, 113, 124, **125**, 128, 129, 265
Bactrian era 124–5, **125**, 127–8
Bactrian gold coins 129, 132, 133, 238
Bactrian inscriptions
Adomano 129, *130*, 132
'high god' 119, *248*
see also exalted god
Huvishka 83
Kanishka I 55, 60, 65, 173–5, *173–4*, **175**, 177
Kanishka II 95
Kanishka III 102
Kidara 129
Kidarite kings **136–7**
Kujula Kadphises 36
Kushanshah title 23, 118
Mahi, Shaka, Kipunadha and Meśra (late kings) 104, 107
Nana (goddess) 121
Peroz (Kidarite) 135
Tokharistan 28
Vasishka 98
Vasudeva I 87, 89, 91
Vasudeva II 89, 102, 103
Wima Kadphises 51
Wima Takto 44, 45, 46
Bactrian seal inscriptions *26*, 96
Bactrian sealing inscriptions 113, 128
Bahram II (Sasanian emperor, AD 276–93) 112, 251, 256, 257
Bala (monk) *53*, 63, 69–70, 94
Baldwin, A.H. & Sons Ltd 292, 294
Balkh *vi*, **21**, *27*, *31*, *72*, *111*
Balkh mint 9, 88, **89**
duration of 172
Kidarites to the Hephthalites coins *266–7*, 267, *270–1*
Kushan coins
Huvishka 187, *188*, 190–1, *190*
Kanishka I *173–4*, 174
Kanishka II 215
Vasudeva I *205*, 207–8, 209
Vasudeva I imitations 209, *210–11*
Wima Kadphises 171
Kushano-Sasanian coins
Ardashir II *246*, 247
Hormizd I *252*, 253, *254*, 255
Hormizd II *256*, 257
Peroz I 248, *248–50*, 251
Peroz II 257, *258*
Varahran 259, *260–2*, 262–3, 263–4, *264*
loss of 92, 93
Sasanian coins 116
Ban Chao (Chinese general) 31, 32, 33
Ban Yong (Chinese general) 30–1, 48, 52
Bandhogarh inscriptions 68, **70**
Banerjea, J.N. 38
Barbaricon 38, 39, *39*, 40
Bardaisan (Syriac philosopher) 23
Barygaza (Broach) 38–9, *39*
Basu Majumdar, S. 10, 47
Becker, B. 294
Beckwith, C. 28–9
Beever, Christopher 295
Begram *27*, *31*, *43*, *111*
coin production centres 33, 44
coins circulated 140, 158
excavations 6, 15
Kidarite coins 107, 263
Soter Megas coins 153, 161, 163, 164
'treasure rooms' 98–9
Begram mint
duration of 172
Kushan coins
Huvishka 84, **84**, 195, *195*, 198
Huvishka imitations *202*
Kanishka I 175, *176*, 179–81, *180*

Kanishka II *219*
Kujula Kadphises 145, 147, *148*, 150–1, *150–1*, 153, 156–7
Soter Megas coins 159–60, *159*, **160**, *162*
Vasishka 97
Vasudeva I *207*
Wima Kadphises *169*, 170–1
Kushano-Sasanian coins
Hormizd I *254*
Hormizd II *256*, 257
Peroz I *250*, 251
Peroz II 257, *258*
Shapur II 258, *259*
weights of coins *196*
Bengal 71
Benlian Brothers 288
Bennett, C. 34
Bern Museum 3, **4**
Bernstein, Basil 8, 14, 18
bgy (lord/god) 118
Bhandarkar, D.R. 108
Bhanja, Purna Chandra, Maharaja of Mayurbhanj 291
Bhitari inscription 138
Bhuj hoard 233
Bhumideva (goddess) 137
Biddulph, John 289
Bihar 71
Bimaran reliquary 63, *64*
Bivar, A.D.H. 112
Bizago (god) *188*, **191**
Bleazby, G.B. 291
Blockley, R.C. 125
Boddo (Buddha) **178**
bomb damage at the British Museum 281, *282*
Bons, Heinz *77*
Borrell, Maximilian John 283
Bose, S.K. 71
bowman deity 84, **84**, *196–7*, 198
Bracey, Robert 275
Brahmanism 91, 137
Brahmi inscriptions 22
Brereton, Mrs. 285
Brind, Henrietta Sarah 284–5
British Museum catalogues 275–6
British Museum collection 2, 3, 4–5, 272–4, *272*
acquisition numbers 276–7
acquisitions by date 278–88
acquisitions, 20th century 288–92
bomb damage 281, *282*
earliest Kushan coins 277–8, *277–8*
forgeries 281, *281*
hoards, dealers and collectors 292–6
losses 281, *282*
publications 275–6
registration codes 296
British Museum Department of Antiquities 274
British Museum Department of Coins and Medals 274–5
British Museum Department of Oriental Antiquities 292
bronze roundels 76, *76–7*, **78–9**, 79–80
bronze water pot 73, *74*
brooches *see* bronze roundels
Bu-ston, *History of Buddhism* 101
Buddha images
coin (forgery) 83
dating of 14
Kanishka I coins 179–81, *180*, 182–3
styles of 94, *95*
see also Boddo, Maitreya
Buddhamitra (nun) 10, *53*, 63, 69–70, 94
Buddhism 13, 14, 60–4, 98, 103, 122, 137
Buddhist documents 129
Buddhist imagery 38, *38*, 49, 63–4
Buddhist inscriptions 61, 62, 73, *74*, 83, 100
Kujula Kadphises and Odi kings of Swat 34
Wima Takto 43, 47
Buddhist narratives 54, 83, 101
Buddhist pilgrims 54, 67, 129, 137
Buddhist reliquaries *see* bronze water pot; reliquaries
Buddhist texts 23, 28, 60, 61, 62
Buddhists, kings as 38, 52, 67
bulls, images on coins
Hormizd I *252–3*, 253
Kanishka II *218*
Kanishka III 224, *224*
Kujula Kadphises 37, 146, *147*
Peroz I *248*, *250*
Peroz II *258*
Varahran *260–1*
Vasishka 222, *222*
Vasudeva I *204–8*
Wima Kadphises *167*, *169*
Wima Takto *164*
Burgess, James 287, 288
Burgon, John William 285
Burnes, Sir Alexander 272, 273, *273*, 277, *277*, 279
Travels into Bokhara 277, *277*
Burns, Craig A. 294
Burslem, Rollo 283–4

Calcutta *see* Indian Museum, Calcutta/Kolkata
camels, images on coins 37, 146, *147*, *164*
Campbell, H.F. 292
Carnegie, Donald Christian Strachan Lindsay 288
Carter, M. 116, 247
Carus (Roman emperor, AD 282–3) 112
caskets 59, 61, *61*, 63, *64*, 65
Castana (Western Satrap) 70–1
ceramics 23–4
Chakravarti, R. 104–5
Chandragupta II (Gupta king), gold dinar *105*
Characene coins 68, *68*
Chater, G. 292
Chattopadhyay, B. 50, 64, 84
Chaumont, M.L. 97
Chhabra, B.C. 108
China
marriage alliances 41
trade with Rome 86
tribute envoys 87, 128–9
Chinese Buddhist pilgrims 54, 67, 129, 137
Chinese silk 39–40

Chinese sources
Da Yuezhi and Tocharoi 27–8, 28–9, 102
Huvishka 71
Kanishka I 54, 56, 62, 67
Kidara/Kidarites 123–4, 129, 130, 135
Kujula Kadphises 32–3, 34, 36
Kushan empire 30–1, 32
Kushan, use of term 23
Kushano-Sasanian royal imagery 116, 118
later contacts 108
Vasudeva I 87–8
Wima Kadphises 48, 52
Wima Takto 42, 43, 44, 48
Chinese wooden documents 27, 30
Choresmia *43*, 52–3, *111*
chronology 1, 2, 5, 6, 11–12, **12**, 15, 16–17
Clark, Sir Allen George 292
Clark, Malcolm George 290
Classical sources 28, 30, 112
Aurelian 103
Dio Chrysostomus 28
Historia Augusta 103, 112
Isidore of Charax 39
Panegyrici Latini 112
Periplus of the Erythraean Sea 28, 38, 39, 40, 93
Pliny the Elder 27, 39
Pompeius Trogus 30
Priscus 124, 125, **126–7**, 127, 130
Procopius 123, 128
Ptolemy 28, 67–8, 70, 108
Strabo 30
Classical world
Augustus, coins of 36, *36*, *152*
contact with
Antoninus Pius 68, 71
Hadrian 48, 52, 68
Roman Empire *39*
Cobb, Evelyn Hay 292
coin impressions *99*
coin production centres 33, 44, 74
see also mints
Cole, William Willoughby, 3rd Earl of Enniskillen 286
collections 3–4, **4**
Collingwood, R.G. 12
Collyer, H.O. 292
colonial scholarship 5, 11, 13, 15, 17–19
control marks
'Heraus'-type coinage 144
Kidarite Huns 235
Kidara 238
Kirada 236, 237, *238*
Peroz 238
Kushan coins
Kanishka II 215, *218*, 219, *219*
Kanishka III 224, *224*
late kings Mahi, Shaka, Kipunadha and Meśra *234*
Mahi 229–30
Meśra 229, *229*
Shaka 230, *231*, **232**, 233
Vasishka 221, *221–2*, 222, 223, *223*
Vasudeva II 226, *226*, 227, **227**, 228
Cooper, John R. 292
copper alloy objects *see* bronze roundels
copper coins, other
Achyuta 108–9, *109*
Aryamitra, king of Ayodhya *54*
Hermaeus imitation *148*
Kota coins 99, *99*
Koziya, king of the Paratas *55*
Kunindas *47*
Pakores, Indo-Parthian ruler in Arachosia 40–1, *41*
Rudradasa, king of the Audumbaras *47*
Satyamitra, king of Ayodhya *54*
Sodasa, Indo-Scythian satrap of Mathura 43, *43*
titled officials named on 44
copper sources 15
Corbell, Douglas C. 293
corpuses 7
cotton 39
countermarked coins 52
Court, Claude-Auguste 278
Coutts, E.G. 289
Craig, Richard Manifold 289
Cribb, Joe 63, 145, 274, *274*, 275, 276, 296
crisis in reign of Huvishka 73, 74, 76, 187, *192*, 193–4, 199, 201, *202*, 204
Cunha, Jose Gerson da 287
Cunningham, Sir Alexander
collection 273–4, *274*, 278, 284, 292
publications 4, 5, 14, 275
square coin 199
curatorial staff 274, *274*, 275
Cureton, Henry Osborne 285
Curtis, Vesta 275
cut coins 153

Da Xia 27, 29
Da Yuezhi 27, *27*, 28, 29, 30, 32, 41
coin production centres 33
description of 102
see also Small Yuezhi
daḍanāyaka (general) 62
Das Gupta, C.C. 50
Dasht-e Nawar inscription *vi*, *27*, 38, 44, 45, 46, 73
dayuezhi –27
see Da Yuezhi
de Blois, F. 124, 125
de la Vaissière, É. 124–5, 129
De Salis, John Francis William, Count 285
dealers and collectors 293–6
Dean, H.E. 289–90
debasement 201, 204, 214, 217, 219
see also gold fineness
Debra Damo hoard *39*, 92–3, 171
de[*bra*]*vadasa* 51, 98
decolonising 17–19
deities 37–8, 47, 64–5, 66–7, *67*, 84–5, **84–5**, 177, **178**
see also Greek gods (Dionysus, Heracles, Nike, Serapis, Victory, Zeus); Indian gods (Bhumideva, bowman deity, eight-armed deity, Krishna, Kumara (Komaro),

Mahasena (Maaseno), Nagas, Rama, Śiva, Skanda (Skando), Surya, Uma (Ommo), Vasudeva Krishna, Vishaka (Bizago) Vishnu); Iranian gods (Ahuramazda, Anahita, Arshtat, *bgy*, exalted god, high god, Mithra, Narasao, yazata); Kushan gods (Anemos, Ardochsho, Ashaeichsho, Athsho, Boddo (Buddha), Helios, Hephaistos, Iamsho, Lrooaspo, Malissoph, Mao, Manaobago, Metrago (Maitreya), Miiro, moon god, Mozdooano, Nana, Nanaia, Nanashao, Oachsho, Oado, Oanindo, Oesho, Oron, Oxus, Pharro, Rishti, Salene, sun god, Teiro)
Delplace, C. 40
demonetised Kushan coins 55–6, 68
denarius aureus (gold denarius) 139, 170
devaputra/devaputro (son of the gods) 23, 37, 46, *46*, *58*, 60, 91, 98, 102, 107
devavrana (having fortune/splendour through the gods) 51
devavranasa svayab[h]alasa 51
[*dha*]*mathida* (steadfast in the law) 98
dha[r]mathida (steadfast in the law) 37, 38
dies
die study 7, 8–9, 145
die counts 13, 171, 182–3, 190–1, **191**, 230, 232, **233**
as evidence for crisis 73, 187, *192*, 193–4, **194**
'Heraus' coinage 144–5
rotation of 86, **175**, 177–9, **178**, 179–80, 194, 198
dinar 139, 166, 168, 170, 171, 265
Dio Chrysostomus (Roman orator) 28
Dionysus (god) **191**
donations 52, 139
Dorn'eich, C. 29
Dumi yabgu 31, 141–2, 145
dvimukhalinga (two-faced linga) 51–2
dynastic history 2, 16

East India Company 272, 273, 277–8, 279–80, 296
East India Silk Company 279
economic history 9–10
Eden, Emily 284, *284*
Egerton, Sir Raleigh Gilbert 290
Eggermont, P.H.L. 108
eight-armed deity *196–7*, 198
elephants, images of
on brooches 76, *76*, 79
on coins
Huvishka *186*, 187, 195, *195–7*, 198, *199*
Wima Kadphises 50, *167*
on seals *81*
Elishe (Armenian historian) 128
epidemics 73, 187, *192*, 193–4, **194**
Epigraphical Hybrid Sanskrit inscriptions 22
Huvishka 83
Kanishka I 60
Kanishka II 95–6
Kujula Kadphises 36, 144
Vasishka 98
Vasudeva I 87, 91
Wima Kadphises 48, 51
Wima Takto 46
Errington, Elizabeth 59, 132, 274, *275*, 296
Eucratides I (Graeco-Bactrian king) *142*, 143, 144
Euro-centric scholarship 4, 11
European travellers 272, *272*, 278
exalted god 119 *248*, *250*, *253–6*, *258*, *260*
see also high god
excavation, coins found at
Ahicchatra, 108-9
Aziz Dheri 112
Begram 98–9
Choresmia 52
Kosam 68–9
Sonkh 54, 74, 198, 251
Surkh Khotal 60, 121, 183
Taxila, 33–4, 114, 139, 140, 158, 230, 233
Uzbekistan 179
Vaisali 52
Viratgarh 290
exports of antiquities 288–9

facsimile coin 277, *277*
Falk, Harry 31, 32–3, 34, 42, 46, 50, 57, 58, 72, 89–90, 93, 96, 97, 105, 165
Fan Ye (Chinese historian) 23
Farn Sasan (Indo-Parthian king) 41
Faustus (P'awstos) (Armenian historian) 114
Faxian (Chinese Buddhist monk) 137
Fida, B.M. 293
First Afghan War 277–8
Fitzwilliam Museum, Cambridge 273
Fleet, J.F. 108
forgeries 281, *281*, 286
Foucher, Alfred 14
Frere, Sir Henry Bartle Edward 282, *282*
Friedberg, Robert 292
Fussman, G. 44

Gandhara
imitation coins 201
Kidarite coins for 235
Kidarite kings 123, 124
Kushan empire *27*, 28, *31*, 32, 34, 42–3, *72*
Soter Megas coins 161, 163–4, *163*
Gandharan art 14, 37, 63, 90–1, 94, 99, 172
see also Gandharan sculpture
Gandharan coins 130, 133, 135, 137
Gandharan mint
imagery
gods 66, 84, **84**, 86
halo 60
Kidarite Huns coins
Kidara 238–9, *242–3*
Kirada 236, *237–8*
Peroz *237–9*, 238
Kushan coins
Huvishka 82, 187, *189–90*, 190–1, *192*, 193–4, **194**, 195, *196–7*, 198
Huvishka imitations *202–3*
Kanishka I 174, *174*, 175, 179, 181–2, *181*
Kujula Kadphises coins, absence of 156
Vasudeva II 226

Wima Takto 46
officials named on coins 74
weight standards 44, 74
Gandharan sculpture 14, 37, *38*, 63, 91, 94, *95*, 99
Gandhari documents 23
Gandhari inscriptions
Huvishka 73, *74*, 83
Kanishka I 60
Kanishka II 95–6
Kanishka III 102
Khotanese coins *33*
Kujula Kadphises 37
Vasishka 97, 98
Vasudeva I 91
Wima Kadphises 50, 51
Wima Takto 46
see also Kharoshthi inscriptions
Gangetic hoards 201, *202*
Gangetic valley 17, *53*, 63, 68–70
Gaofu 32, 34, 40
Gardner, Percy 4, 274, *274*, 275, 275–6, **276**
gemstone seals 26, *26*, 46, *46*, *81*
see also seal impressions; sealings; seals
gender and numismatics 10
genealogies 14
Ghirshman, R. 264
Gibbs, James 286
Gilmour, W.A. 291
Glass, A. 50–1, 165
Gnoli, G. 64
Göbl, Robert 2, 3, 6, 7, 14, 18, 22, 52, 76, 80, 84, 86, 88, 92, 93, 96, 102, 105, 114, 116, 193, 199, 208, 209, 249, 276, *276*
collection 295
System und Chronologie der Münzprägung der Kušānreiches 6, 7, 8, 276
goddess on lion design 271
goddesses 10
see also deities
gods *see* deities
gold coinage 16, 139, 166–8
gold coins, other
dinars of Samudragupta and Chandragupta II *105*
Ousanas, king of Axum *93*
gold fineness
Kushan coins
Huvishka 201, 204
Kanishka II to Vashishka 217, 219
Kipunadha 233
Shaka 230, 232–3
Vasudeva I 208
Vasudeva II 227–8
see also Appendix I; debasement
gold objects
clasps 35, 36
pendants 35
gold, sources of 52
Gondophares (Indo-Parthian king)
coins *26*, 35–6, 143, *154*, 157, 159
seal 56
tamga 25, *26*
Gourlay, William Robert 291–2
graffiti 102, 110, 112, 246
Grant, Alexander 286
Great Kushans 13–14
Greek era **21**, 22, 34, **35**, 58, *59*
Greek gods 37
see also deities
Greek inscriptions **22**, **24**, 34, 36, 38, *40*, *42*, 48, 50, 55, 58, 60, 65, *93*, 110, 139, 140, 143, 146, 151, 158, 161, 165, *169*, **175**, **176**, 179, 183, 204, 251, 302–4, 306, 308–10
Grenet, F. 32, 64, 91, 97, 116, 124, 129, 130
Gresham's Law 55–6, 73, 201
Grumbates (Hun king) 113, 135
guishuang xihou 30
guishuangwang 23
Gupta coinage 10, *11*, 71, 104, *105*, 106
tamgas 25
Gupta emperors **106**
see also Samudragupta, Skandagupta
Gupta empire 108
Gupta-period images 94, *95*
Gupta, P.L. 46, 52, 69, 74–5, 230
Gurgamoya (king of Khotan) *33*
Guthrie, Charles Seton 285–6

Hadrian (Roman emperor) 48, 52, 68
Hamilton, George 289
Han Shu (Chinese chronicle) 27, 29, 30, 31, 32, 41, 42, 43, 44, 141
Harmatta, J. 52
Härtel, Herbert 54
Hathigumpha inscription *43*, 44, 57
Haughton, Henry Lawrence 292
Haughton, John Colpoys 280, *281*
Hawkins, Edward 279
Hay, William E. 285
Hazara District
coin production centres 33
Kujula Kadphises coins 35, 37, 145–6, 151, *152*, 158
Wima Takto coins 46, 165, *165*
Heliocles (Graeco-Bactrian king)
imitation coins 140, 145, *146*, 158
tetradrachm *146*
Helios (god) 38, **175**, *176*, 177, 178, **178**
see also Miiro (god)
Helleno-centric biases 4, 5, 14
Henning, W.B. 52, 53
Hephaistos (god) 177
Hephthalites 123, 128, 129, 265
Heracles (god) 37, *38*, 47, 49, 50, 66, **84–5**, 111, *148–9*, 172, **175**, 177, 178, **191**, 198
'Heraus' coinage 31–2, 35, 36, 144–5
Hermaeus (Indo-Greek king) coinage 33, *33*, 147, *148*, 150–1, 156–7, 158
Hermaeus imitations, copies of 151, *151*, 153, *154*
Heron-Allen, Edith Emily 291
hierarchical disciplines 8, 14, 18
'high god' 119, *250*, 251, *252*, 253, *254*, 255, *255*, 257, *258*, 262, 263
see also exalted god

Hill, Sir George Francis 289, 290, *290*
Hill, J.E. 32
Historia Augusta 103, 112
historical context 1
historical probability 12–13
historical sources 27–30
historical studies 15
hoards
  Akhun Dheri 102–3, 112
  of Ayodhya and Kushan coins *53*, 68
  Aziz Dheri 112
  Bhuj 233
  dates and 17
  Debra Damo *39*, 92–3, 171
  excluded from this publication 3
  Gangetic 201, *202*
  Hund 233
  Jhang 106
  Kanishka I Buddha coins at Khalchayan 183
  Kushan copper coins in northern India 55–6, 69
  late kings Mahi, Shaka, Kipunadha and Meśra 106–7, 229, 230, 233
  Mathura 99
  Mithathal hoard 106, 230
  Ray Dheri **209**, 211
  Soter Megas and Wima Kadphises coins at Takht-i Sangin 166, 171
  Tepe Maranjan 106–7, 129, 130
  Tordher 217
  and typologies 10
  'Vasudeva imitations' from Gandhara 214
hoards, dealers and collectors 293–6
Hoernlé, August Friedrich Rudolf 288, 289
Hoey, William 290
Hollings, George Edward 284
Honigberger, Johann Martin 278, *278*, 279
Hormizd I (Kushano-Sasanian king, *c.* AD 270–300) **21**
  coins
    Bactria, coins for *252*, 253, *254*, 255
    prolific issues *252*, 253, *254*
    southern coins *254*, 255
    special issues 255–7, *255*
  historical account 111–12, 226
  representations of **117**
  titles **120**
Hormizd II (Kushano-Sasanian king, *c.* AD 300–3) **21**, 112, **117**, **120**
  coins *256*, 257
Hou Han Shu (Chinese chronicle)
  envoy from Rome 86
  Huvishka, events during reign of 71
  Kidara and 123, 124
  Kujula Kadphises 30–1, 32, 33, 34, 36, 141, 156
  peoples of the Kushan empire 40
  silk trade 39
  Wima Kadphises, events during reign of 48, 52
  Wima Takto 42
Humphries, Alan J. 293
Hund hoard 233
Hund mint 224–5
Huni (king of Sogdia) 128, 129, 130–1, 135
Huns *see* Alchon Huns; Kidarite Huns
hunting scenes 132, *133*
Huvishka (Kushan emperor, *c.* AD 151–90) 13, **21**, **22**, 23, **24**
  chronology, problems of 74–5
  coins
    coinage problems 187
    copper coinage design function and production system 195, *195–9*, 198–9
    currency crisis, legacy of *200*, 201, *202–3*
    fire-damaged coins 281, *282*
    gold coinage, changes in fineness 201, 204
    gold coinage design function and production system 187, *188–90*, 190–1, 193
    gold die iii at the subsidiary mint *192*, 193–4, **194**
    imitations, problem of 199, 201, *202–3*
    imperial coinage *168*, 184, *186*, 187
    production centres 166, *166*
  contemporaries and international contacts 86–7
    Yaudheyas 86–7
  historical account 71–4, *72*
    coins 73–4
    copper coins found in northern India 55–6
    documents 71
    inscriptions 71–3
  inscriptions 36–7
  name and titles, forms of 60, 83
  religious connections and imagery 83–6
    Buddhism 83
    gods on coins 83–5, **84–5**
    pantheon, purpose of 85–6
  royal images 45, 75–83
    bronze roundels 76, *76–7*, **78–9**, 79–80
    on coins 81–3
    painting on silk 75–6
    sculptures 80
  tamga 25, *25*, 26

Iamsho (god) **191**
imitation coins
  Azes II 153, *154–5*, 155, 158
  Heliocles 140, 145, *146*, 158
  Hermaeus 33, *33*, 147, *148*, 150–1, 156–7, 158
  Hermaeus imitations, copies of 151, *151*, 153, *154*
  Huvishka 199, 201, *202–3*
  Kanishka I 183–4, *184–5*
  Kidara 244–5
  Kujula Kadphises, from Akra 153, *154–5*, 155–6
  Kushano-Sasanian 209, **209**, *210–14*, 211–14, 219–20
  late kings Mahi, Shaka, Kipunadha and Meśra 233, *235*
  Shapur II 233
  Vasudeva II *228*
India *see* Mathura; Saketa
India, coins found in 52, 55–6, 109
India, Independence of 288–9
India Office (IOC; IOLC) 272–3, 275, 296
Indian gods
  Buddha associated with 60, *61*, 63, *64*
  concept of kingship and 79, *81*, 82
  Krishna 91

Kushan gods and 64–5, 66, *66*
Mahasena 76
Śiva 37–8, 51, 52, 72, 84
Indian historiography 13, 104
Indian king *see* Samudragupta
Indian Museum, Calcutta/Kolkata 3–4, **4**, 5, 287
Indian Ocean 40
Indian religious devices *130*, 135, 137, *138*
Indian sources
Kanishka I 54, 57
Kushan era 23–4, 125
Tokharistan 28
Wima Takto 44
Indian title *svami* 83
Indian Treasure Trove Act (1878) 288
Indian weight standard 143, 147, *148*, 150, 156, 163
Indians, king of 96
Indo-Greek military activity 54
Indo-Parthian coins 26, *26*, 33, 34, 35–6, 38
Indo-Parthian kingdom 32, 38, 40–1, *43*
Indraji, Bhagvanlal 287, *287*
Indus region 143
Indus River *27*, *31*
inferences 13
inscriptions 6, 14–15
Buddhist *see* Buddhist inscriptions
graffiti *see* graffiti
Kanishka named on 93–4, **94**, 96
languages used 22; *see also* Bactrian inscriptions; Epigraphical Hybrid Sanskrit inscriptions; Gandhari inscriptions; Greek inscriptions; Kharoshthi inscriptions
from Palmyra 40
religious 25, 46–7, 69–70
religious donations 139
testimonial inscriptions 57
inscriptions mentioned
Allahabad 96, 99, 104, 105, 108, *109*, 138, 230
Ara 89, 93, 101, 102
Ayrtam 83
Azes era 33, 34, **35**, 36
Bandhogarh 68, **70**
Bhitari 138
Dasht-e Nawar 38, 44, 45, 46, 73
Hathigumpha *43*, 44, 57
Junagadh 86
Kaba-ye Zardošt 23, 97, 100, 109–10, 114, 245, 251
Kamra 14–15, 36, 51, 98, 101
Khalatse 48, 49, 50, 51
Mat 36–7, 44, 70–1, 72–3
Mathura
Buddhamitra and Bala 69–70
Huvishka 71–2
Vasudeva I, chronology of 89
Vasula (Jain nun) 58
Wima Kadphises 48
Wima Takto 46
Paikuli 100, 103, 110, 246
Rabatak
Ahicchatra, not mentioned in 109
Bactrian 29
importance of 14
Kanishka I 51, 53–4, *53*, 55, 57, 60, 64
Kujula Kadphises 36, 38
problem of 57
Wima Kadphises 48
Wima Takto 42, 44, 45
Reh 25, 44, 46–7
Satna District 108
Senavarma 15, 32, 34, 36, 37, 38, 40, 51
Sui Vihar 55
Surkh Kotal 60, 72, 73, 83
Tochi Valley 125
Zeda 96
Iranian costume 45, 50, 58, 89, *90*, 159
Iranian gods *61*, 65, 66–7, 83–4
Iranian Huns *see* Kidarite Huns
Iranian, Kushans identified as 29
Iranian language *see* Bactrian
Isidore of Charax (Greek geographer) 39
iśvara/iśpara (lord) 51

Jacomb, Marietta Stuart 290
Jain texts 108
James, Edmond Hilary Salt 290
Javukha (Alchon Hun ruler) 129, 135
Jayadaman (Western Satrap ruler) 37
jayata (victorious) 98
Jervis, Thomas Best 279–80
Jhang hoard 106
Jihonika/Zeionises (Indo-Scythian satrap) 40, *40*, 49
coins 140, 143, 146, *147*, 165
vase/jug 40, 139
Joshua the Stylite (Syriac historian) 128
Junagadh inscription 86

Kaʿba-ye Zardošt inscription 23, 97, 100, 109–10, 114, 245, 251
Kabul *72*, 264
see also Tepe Maranjan hoard
Kabul mint 114
Kabul region 32, 113, 114
Kafirnigan valley coin production centres 33
kahapana (*kārṣāpaṇa*) measure of value 139
kaisa[ha]ra 102
Kalhana (Indian historian) see *Rājataraṅgiṇī*
Kamra inscription 14–15, 36, 51, 98, 101
Kandahar 41, 55
Kandahar Museum collection **4**, 41, 55
Kangju 41–2
Kanishka (son of Huvishka) 58
Kanishka I (Kushan emperor, *c.* AD 127–51) 12, 13, **21**, **22**, **24**
chronology, problems of 57–8, *58*
coins
Buddhist images 179–81, *180*, 182–3
continuity and change 177
copper coinage 175, *176*, 177
copper coinage design function and production system 179–83, *180–2*, *196*
gold coinage *168*, 173–5, *173–4*, **175**

gold coinage design function and production system **175**, 177–9, **178**
imitation coinages 183–4, *184–5*
model for Kushan and later coin design 183
production centres 165, *166*
contemporaries and international contacts 67–71
Ayodhya 68
Magha kings of Kosam 68–70, *69*, **70**
Samatata and eastern India 71
Western Satraps 70–1
historical account 53–7, *53*, 72
copper coins found in northern India 55–6
empire, extent of 55
language, change of 55
military campaigns 53–4
political allegiance/autonomy, evidence of 56–7
kingdom *27*, 28
name and titles, forms of 60
religious connections and imagery 60–7
Buddhism 14, 60–4
gods on coins 37, 66–7
Kushan religion 64–6
other religions 67
royal images 58–60
coins 59–60
portrait sculpture 58
Shah-ji-ki- Dheri casket 59, *61*
tamga 25, *25*
Kanishka II (Kushan emperor, *c.* AD 230–46) **21**, **22**, **24**
chronology, problems of 57–8, 93–5, **94**
coins
copper coinage 219–20, *219–20*
bomb-damaged coins 281, *282*
gold coinage to reign of Vasishka 217, *218*, 219
gold fineness 217, 219
reduction of the empire 215, **216–17**, 217
contemporaries and international contacts 96–7
historical account 93
name and titles, forms of 95–6
religious connections and imagery 96
royal images 95
tamga 26
Kanishka III (Kushan emperor, *c.* AD 267–72) **21–2**, **24**
coins 224–5, *225*
historical account 57–8, 74, 93, 101–2
Kankali Tila 58
Kara-Tepe *72*, 110, 112, 246
karalrang 15, 44, 61, 90, 198, 208, 304, 310
Karp, C. 295
Kashgar 48
Kashmir *27*, *31*, *72*, 140, 141
coin production centres 33, 44, 74
Kidara imitations 244–5
Kujula Kadphises 145, 146, *147*, 158
Kashmir mint
Huvishka 82, 84, **84**, 195, 198, *198*
imagery, halo image 60
Kanishka I 174, 175, 177, 179, 182, *182*
Kujula Kadphises 156
Wima Takto 46, *164*, 165
Kashmir Smast shrine 137, 233
Kavad (Bactrian name) 118
Kennedy, J. 28
Khalatse inscription *vi*, *43*, 48, 49, 50, 51
Khalchayan art *vi*, 35, 45, 90
Khalchayan hoard 183
Khan, Gul Rahim 15
Kharahostes (Indo-Scythian satrap) 43, 47
Kharavela (king of Kalinga) 44
Kharoshthi documents 23, 46, *46*, 50, 51, 52, 60
Kharoshthi inscriptions 22
'Heraus' type control marks 144
Huvishka coins 198, *198*
Kanishka I period *59*, *61*, 177
Khotanese coins 33, *33*
Kujula Kadphises coins 139–40, *148*, 150, 151, 158
Akra imitation coinage 153, 155
Paratarajas 100, **100**
Rudradasa, king of the Audumbaras *47*
seal 46, *46*
Vasishka period 51, 60, 93, 97, 101
Wima Kadphises coins 48, *167*, *169*, 170
votive coins 172
Wima Takto coins 46, 163, 164, 165
see also Gandhari inscriptions
Khingila (Alchon Hun ruler) 123, 132, *133*
Khosrov (Armenian king) 88, 97
Khotan *27*, *31*, 55, 67
Khotanese coins 33, *33*, 35, 54–5
Kidara (Kidarite ruler, *c.* AD 355–85) **21**
coins
copper coinage 239, 241, *244*
gold coinage 238–9, *240*, 244, 265, *266*, *267*, **268**
gold coinage in the name of Samudragupta *240*, 244
later inscriptions with Kidara 244–5
silver coinage 241, *242–4*, 244
Varahran and 259, 263–4, *264*
historical account 123–4, 129–31, **131**, 133, 135
Kidarite Huns 20, **21**, 23, 105, 106, 107, *111*, 113, 123
Kidarite Huns, coins 140, 233–45
control marks 235
influences on 235
mints 235, *236*
monograms **235**
rulers
Kirada 236–8
Peroz 238
Kidara 238–45
Orōlano *266*, 267
Pidoko *266*, 267
Tobazino 264, 267
Ōkilano 267
Ōzmano 267
Kidarite kings **12**, **106**
Kidarite tamga 26
Kidarites to the Hephthalites
chronology, problems of 129–31, **131**
coins 264–71, *265*, **268**
see also Kidarite Huns, coins
Peroz (Sasanian emperor) 264, 267, 269, *269*

Hephthalite/Alchon Hun gold 269, *270–1*, 271
contemporaries and international contacts 137–8
historical account 123–5, **125–7**, 127–9
names and titles, forms of 132–3, 135, **136–7**
religious connections 135, 137
royal images 131–2, *133*, **134–5**
'king of kings' 112
'king of the Indians' 96
Kipunadha (Kushan emperor, *c.* AD 342–52) **21**, **22**, **24**
chronology, problems of 106–7, **233**
coins 233, *234*
gold fineness 233
imitation coins 233, *235*
contemporaries and international contacts 107–9
historical account 104–6
mints 230, 233
name and titles, forms of 107
religious connections and imagery 107
royal images 107
Kirada (Kidarite ruler, *c.* AD 345–50) **21**, 131, **131**, 133
coins 236–8, *237–8*, 259
coins in the name of Varahran 263
Kirkgate Stamp Company 293
Knutt, Mr. 283
Kolkata *see* Indian Museum, Calcutta/Kolkata
Komaro (god) *188*, **191**
Kosam 53, *53*, 63, 68–70, *69*, **70**
Kota coins 99, *99*, 104, 108
Kounchas (Hun leader) 124, 135
Koziya (king of the Paratas) *55*, **100**
Krishna *see* Vasudeva Krishna
Krmnicek, Stefan 10
Kshaharata rulers 199
Kujula Kadphises (Kushan yabgu, Kushan emperor, *c.* AD 50–90) 32–42
chronology **21**, **22**
chronology, problems of 34–5, **35**, 57
coins 141–58, *141 see also* Soter Megas coins
copper coinage 145–7, *146–52*, 150–1, 153
copper coinage weight standards *150*, 151, 153
imitation coinage from Akra 153, *154–5*, 155–6
production, scale and pace of 156–8, *157*
silver coinage 142–5, *142*
territory 141–2
contemporaries and international contacts 38–42
trade 38–40
'Heraus' coinage 31–2, 35, 36, 144–5
historical account 32–4, 72
coin production centres 33
distribution of coins *31*, 34
empire 31, *31*, 32, 33–4
events of reign 32–3
influence on Khotanese coins 33
inscriptions 33, 34, **35**, 36, 37, 38
military campaigns 34
sources 32
name and titles, forms of 36–7, 46
religious connections and imagery 37–8, *38*
royal images 35–6
coins 35
influences on 36
other features 35–6
other media 35
tamga 25, *25*
title 22, **24**
Kulashreshtha, S. 74, 230
Kumar, A. 99
Kumara (god) see Komaro
Kumaradevi (wife of Chandragupta I) 10, *11*
Kumarajiva 28
Kunindas *43*, 47, *47*, 56, 68
Kushan coins 139–40
issued by
Huvishka 184–204
Kanishka I 173–84
Kanishka II 215–20
Kanishka III 224–5
Kipunadha 233
Kujula Kadphises 141–58
Mahi 229–30
Meśra 229
Soter Megas coins 159–65
Shaka 230–3
Vasudeva II 225–9
Vasishka 220–4
Vasudeva I 204–14
Wima Takto 165
Wima Kadphises 166–72
Kushan coins, study of 5–10
alternative approaches 9–10
earliest catalogues 5–6, 265–6
mid-20th century research 6
Münzprägung der Kušānreiches and *Ancient and Classical World* 6–8
numismatics post-1984 8–9
Kushan, definitions and usage of 18, 22–5, **24**
Kushan empire *vi*, *39*, *43*, *72*
chronology 11, 20
name of 23
origins 30–2, *31*
territory 13, 24–5
Kushan eras **21**, 22
Kushan inscriptions 22
Kushan kings 1, **12**, 20, **21**, 22, **24**, 104–5, **106**
Kushan religion 64–6
Kushan studies 10–15, 272–4
Gandharan art 14, 37, 62–4, 76, 90–1, 94, 99, 172
Kushan exceptionalism 13–14
new approaches 15
new evidence 14–15
political history 10–13, **12**
Kushan tamgas 25–6, *25–6*, 42, 52–3
Kushan yabgus 22, 23, 27, 29, 30, 31
Kushano-Sasanian kingdom 93, 103, 105
Kushano-Sasanians (*c.* AD 230–379) **12**, 20, **21**, 23, 109–22
chronology, problems of 114–16
coins 140, 209, 245–64, *245*
Ardashir I (*c.* AD 230–5) 246–7
Ardashir II (*c.* AD 235–45) 247–9
Peroz I (*c.* AD 245–70) 249–53

Hormizd I (*c.* AD 270–300) 253–7
Hormizd II (*c.* AD 300–3) 257
imitations 209, **209**, *210–14*, 211–14
Peroz II (*c.* AD 303–30) 257
Shapur II (Sasanian emperor, AD 309–79) 257–8
Varahran (*c.* AD 330–59) 9, *9*, 258–63
Kirada, in the name of Varahran 263
Peroz, in the name of Varahran 263
Kidara, in the name of Varahran 263–4
catalogue sequence 110
deities 65
start of 93
contemporaries and international contacts 122
historical account **106**, 109–14, **110**, *111*
Ardashir I (*c.* AD 230–5) 110
Ardashir II (*c.* AD 235–45) 110
Peroz I (*c.* AD 245–70) 110–11
Hormizd I (*c.* AD 270–300) 111–12
Hormizd II (*c.* AD 300–3) 112
Peroz II (*c.* AD 303–30) 112–13
Shapur II (Sasanian emperor, AD 309–79) 113–14
Varahran (*c.* AD 330–59) 113
name and titles, forms of 118, **120–1**
religious connections and imagery 118–19, 121–2
Anahita 119, 121
Ardochsho 122
Buddhism 122
exalted god *248, 250, 253, 254, 255, 256, 258*
'high god' 119, *248*, *254*, *255*
see also exalted god
Manichaeism 122
Mithra 121–2
Nana 121
royal images 116, **117**, 118
Kushanshah rulers *see* Kushano-Sasanian kings
Kushanshah title 114, 118, **120–1**, 124, 138

Lafont, Achille or Auguste 280–1
Lafont, Jean-Marie 281
Lahiri, B. 104
Lahore Museum 3–4, **4**, 5–6
Lane-Poole, Stanley 275
Langond, W. August 284
lapis lazuli 40
Last, A.S. 291
Law, Edward, 1st Earl of Ellenborough 278, 279–80, *280*
Law Code of Manu 16
Lawrence, Sir Henry Montgomery 273, 295, *295*
Lawrence, John 295
Lawrence, Laurie Asher 291
legal codes 16
Lewis, Richard Boys 294
Liang Shu (Chinese chronicle) 108
The Life of Aśvaghoṣa 62
Lillie, George Arthur Howard 288
Linenthal, Peter *77*
Lion Capital from Mathura *287*
lion, goddess on 271
lion-skin headdress 111
lion skin, knotted 37, *149*
Loginov, S.D. 116
Loralai *vi*, 100
Loriyan Tangai 63
Lowick, Nicholas 274, *274*, 275
Lrooaspo (god) **178**, **191**
Lubbock, G. 289
Lyall, R.A. 291

Maaseno (god) **191**
MacCullagh, James 282
MacDowall, David W. 28, 33, 41, 105, 274, *274*, 275
McMahon, Sir Vincent Arthur Henry 289
Maga (king of Characene) 68, *68*
Magha kings of Kosam 68–70, *69*, **70**, *111*
Mahabharata 28
Mahābhāsya 54
mahada (great) 37
mahārāja rājātirājā 60
maharaja rajatiraja 37, 46, 98, 102
maharaja rajatiraja devaputra 69, 83, 95–6
mahārājādhirāja (king of kings) 105
Mahārājakaniṣkalekha 101, 102
maharajasa rajatirajasa 51
mahārājo rājātirāja 48, 51
mahārājo rājātirājo 46
maharaya rayatiraya (king, king of kings) 37, 46
Mahasena (god) 76
mahata (great) 46
Mahi (Kushan emperor, *c.* AD 297–302) **21**, **22**, 23, **24**
chronology, problems of 106–7, **233**
coins 229–30, *230*
contemporaries and international contacts 107–9
historical account 104–6
name and titles, forms of 107
religious connections and imagery 107
royal images 107
mahiśvara (or mahaiśvara) sarvaloga'iśvara (great lord, lord of all places) 51
Maitreya (Buddha) 63, 64, *180*
Malavas 104
Mālavikāgnimitra 54
Malissoph (god) **191**
Mall, Chanda 285
Mallory, J.P. 29
Manaobago (god) **178**, **191**
Mani 110–11, 122
Manichaeism 122
Manikyala votive deposit 244
Mann, R. 65, 85
Manu, law code of 16
manuscripts 15
Mao (god) *61*, 65, 66, **84–5**, *173*, **175**, *176*, 178, **178**, 182, *182*, *188*, **191**, *195*, 198, *198–9*, *202*
see also Salene (goddess)
Mariottini Spagnoli, M. 49
Marshall, John 18, 34, 157, 183
Martin, M.F.C. 291
Masson, Charles
coins collected by
from Begram 33

Huvishka 198
Kujula Kadphises 156
Soter Megas coins 160, 161, 163, 164
Vasishka 223
collection 272–3, *273*, 274, 277, 292, 296
excavations 15
Kidara 263
publications 275
trial coin 170
Mat
inscriptions 36–7, 44, 70–1, 72–3
portrait sculptures *vi*, 44–5, 58, 80, 83
sanctuary 72–3
material culture studies 15
Mathura *111*
hoards 99
Kushan rule, evidence for 53–4, *53*, 56, 102, 103–4
Sanskrit, use of 13
satraps, coins of 43, *43*
Soter Megas coins 161, *163*, 164–5
statues and reliefs
Buddhas 63, 94, *95*
Kanishka I 60
Lion Capital *287*
Wima Takto, control of 44, 47
Mathura inscriptions
Buddhamitra and Bala 69–70
Huvishka 71–2
Vasudeva I, chronology of 89
Vasula (Jain nun) 58
Wima Kadphises 48
Wima Takto 46
Mathura mint
coin production 54, 56
Huvishka 82, 84, **84**, 195, 198, *199*
Vasudeva I *208*
weight standards 74
Mātṛceṭa 63, 101, 102
Mayurbhanj, Purna Chandra Bhanja Deo, Maharaja of 291
McMahon, Sir Vincent Arthur Henry 289
Mehama (Hephthalite/Alchon ruler, *c.* AD 480–500) **21**, 129, *130*, 132, 135, 265, 269, *270–1*
Merv *72*, 110, 112, 114, 116
Merv mint
Kushano-Sasanian coins, Hormizd I 255–7, *255*
Mes Aynak 15
Meśra (Kushan usurper, *c.* AD 297–300) **21**, 22–3
chronology, problems of 106–7, **233**
coins 229, *229*
contemporaries and international contacts 107–9
historical account 104–6
name and titles, forms of 107
religious connections and imagery 107
royal images 107
Mēzē (Bactrian name) 118
Mihirakula (Alchon Hun king) 137, *138*
Miiro (god) 38, *61*, 65, 66, 79, **84–5**, *174*, **175**, 178, **178**, 182, *188–9*, **191**, 193–4, **194**, 198, *199*, *202*
Miller, Barbara Stoller 294
Minor Yuezhi see Small Yuezhi
mint control systems 86
mint marks *see* tamgas
mints 12
see also Balkh; Begram; coin production centres; Gandhara; Hund; Kabul; Kashmir; Mathura; Merv; Taxila or Peshawar mint
mints, location unknown
Kushan coins
Kanishka II *208*
Kanishka III 224–5, *224*
Kipunadha 233, *234–5*
Mahi 230, *230*
Meśra 229, *229*
Shaka 230, *231–2*, 233
Vasishka *222*, 223–4, *223*
Vasudeva II 225, *225–6*, 227, 228, *228*
Wima Takto *165*
Kushano-Sasanian coins 247–8, *247*
Mitchiner, Michael 6, 68, 71, 73, 276, 293–4, *293*
Ancient Coins and Early Trade 10
Oriental Coins and their Values, vol. 2, *Ancient and Classical World* 7–8
Mithathal hoard 106, 230
Mithra (god) 121–2, *255*
Mitra Kingdom *111*
Mitra kings of Kosam 69, *69*
monetary system 139
money 8, 9–10
moon god *see* Mao (god)
Morano, Enrico 121
Moses Khorenats'I (Armenian historian) 88, 92, 97
Mozdooana (god) **178**
Mujatria (satrap of Nagarahara) 25, *25*, 40
Mukherjee, B.N. 4–5, 14, 37–8, 42, 44, 50, 57, 84, 89, 92, 104, 172, *274*, 298
Multan *vi*, *72*
muroḍa 96
Murphy, William 282
muruṇḍa 96, 104, 108
museum collections 3–4, **4**
Museums of Rajasthan database 16
Muziris *39*, 40
mzdysn bgy ('Mazda-worshipping lord') 112, 118

Nagas (gods) 104, 108
Nahapana (king of Broach) 38, *39*, 143, 158
Nana (goddess) **178**, 182, **191**, 193–4, **194**
Nana (goddess)
Kushan coins 64–5, 66, **84–5**
Huvishka *188–9*, 193–4, **194**, 198
imitation coins 183, *184*
Kanishka I *173–4*, *181*
Kanishka II 96, 217
Vasudeva I 91, 204, 207
Kushano-Sasanian coins 121, 251
Nanaia (goddess) 177, 178, **178**
Nanashao (goddess) **178**
nandipada symbol
seal *26*
Vasudeva I coins 88, *205*, 207, *207*, 208, 209

Naqš-e Rustam relief 112, 251
Narain, A.K. 70
Narasao (god) 64, 65
Narseh (Sasanian emperor, 293–303 AD) 100, 110
Nasik teaching parcel 99, 224
Nasir, N. 71
National Art Collections Fund 291
Naymark, A. 42, 128
Neil Kreitman Foundation 295
Nepal 295
Nicholson, K.M. 286
Nike (goddess) 37, 45, 143, 153, 158
  see also Victory
Nikitin, A.B. 115–16
Noin Ula, textiles from 35, 50
Nokonzok (Kushan official) 61, 68, 70
numismatics 5–10
  alternative approaches 9–10
  catalogues 5–6
  corpuses 7
  illustrative guides 7–8
  post-1984 developments 8–9
  sylloges 7, 16
  type catalogues 5, 7, 9, *9*, 14, 16

Oachsho (god) *190*
  see also Oxus
Oado (god) 66, **84**, *176*, 182, *195*, *196–7*, 198
Oanindo (god) **191**
object biographies 15
Odi inscription *see* Senavarma inscription
Odisha (Orissa) 71, 184, *185*
O'Dwyer, Sir Michael 18
Oesho (god) **178**, **191**
  Kushan coins
    Huvishka 84, **84–5**, 91–2, *188–9*, *195*, 198
    imagery of 37–8, 47, 49, 50, 59, 65–6, *66*, 84, **84–5**, 92
    Kanishka I 65, *173*, *176*, *181–2*, 182
    Kanishka II 96, 215, *218*
    Kanishka III 102, 224, *224*
    late kings Mahi, Shaka, Kipunadha and Meśra 107
    Shaka *232*, 233
    Vasishka 222, *222*, 223, *223*
    Vasudeva I 91–2, 204, *204–8*, 207, 208
    Vasudeva II 102, 226, *226*, 228, *228*, 229
    Wima Kadphises 51–2
  Kushano-Sasanian coins 119, *248–9*, 249, 251, *260–1 see also* 'high god', exalted god
  Kushano-Sasanian imitations 209, *210–11*
Olivelle, Patrick 16
Olroyd, E.E. 292
Omoiagogano (Karalrang) 198
online databases 16
Orientalism 17–8
Orissa *see* Odisha
Orlagno (god) **178**
Orōlano (Kidarite ruler, *c.* AD 385–400) **21**, 133, *266–7*, 267
Oron (god) **191**
O'Sullivan, Gerald H.W. 291
Ousanas (king of Axum) *93*
overstruck coins
  of Hormizd I 253
  Khotanese coins 33, *33*
  Kota coins 99
  by Peroz I 97–8
  of Peroz I 249
  by Peroz I 249
  reasons for 99
  Soter Megas overstrikes 47, 164
  by Vasudeva II 102, 111–12, 226, 228, 253
Oxus (god) **191**
Oxus/Wakhsh river god *190*
Ōzmano (Kidarite ruler, *c.* AD 450–67) **21**, 133, 138, 267

Paikuli inscription 100, 103, 110, 246
painting on silk 75–6
Pakistan 289
  see also Hazara District; Peshawar; Sind; Swat; Taxila
Pakores (Indo-Parthian ruler in Arachosia) 40–1, *41*, 47
Palmyra *39*, 40, 83
Panchala coins 74, *75*, 109, *109*
Panegyrici Latini 112
Pāradān 100
Paratarajas *vi*, 55, *55*, 100–1, **100**, *111*
Pargiter, F.E. 108
Parkes Weber, Frederick 289, *289*
Parry, W.P. 290
Pataliputra 53, *53*
Patañjali (Indian writer) 54
Periplus of the Erythraean Sea 28, 38, 39, 40, 93
Peroz (Kidarite ruler, *c.* AD 350–5) **21**, 124, 125, 127–8, **131**, 132, 133, 135
coins *237*, 238, *238–9*
coins in the name of Varahran *262*, 263
Peroz (Sasanian emperor, *c.* AD 457–84) 20, **21**, 264, 267, **268**, 269, *269*
Peroz I (Kushano-Sasanian king, *c.* AD 245–70) **21**
  coins
    Bactria, coins for *248*, 249, 251
    expansion south of the Hindu Kush *248–50*, 249
    late issues *250*, 251, 253
    southern coins *250*, 251
  historical account 97, 110–11, 221
  representations of **117**
  titles **120**
Peroz II (Kushano-Sasanian king, *c.* AD 303–30) **21**
  coins 257, *258*
  historical account 105, 112–13
  representations of **117**
  titles **120**
Persian Gulf 68, *68*
Peshawar *vi*, 61, *72*, 97, 123
Peshawar Museum 4, **4**
Peshawar or Taxila mint *see* Taxila or Peshawar mint
Pfisterer, M. 132, 244
Pharro (god) 66, 67, *67*, 84, **84–5**, *173*, **178**, *189*, **191**, *196–7*, 198
Pidaev, S.R. 6, 179
Pidoko (Kidarite ruler, *c.* AD 400–30) **21**, 133, 266, *266–7*
Pitt, M. 294

plagues 73, 187, *192*, 193–4, **194**
Pliny the Elder (Roman historian) 27, 39
political history 10–13, 15
Pompeius Trogus (Roman historian) 30
Poole, Reginald Stuart 274, *274*, 275
portrait sculptures 35, 36, 44–5, 56, 58, 60, 80, 83, 308
Potter, K.H. 64
Pringle, Dr. 286
Prinsep, James 296
  bronze roundels 76, *76*
  collection 273, *273*, 278, 282–3, *283*
  on Kushan religion 64
  publications 275, 283
Priscus (Roman historian) 124, 125, **126–7**, 127, 130
Procopius (Roman historian) 123, 128
propaganda 85
Prophecy of the Li Country 56, 68
Ptolemy (Greek geographer) 28, 67–8, 70, 108
Pulaski, J.H. 292
Pulleyblank, E. 28
Punjab 244
Punjab Government 286
Puranic texts 28, 104, 108
Puri-Kushan coins 71
Puṣyamitra (Shunga ruler) 54
pyxis 89, 90, 91, 103

qusha/qushana 23

Rabatak inscription
  Ahicchatra, not mentioned in 109
  Bactrian 29
  importance of 14
  Kanishka I 51, 53–4, *53*, 55, 57, 60, 64
  Kujula Kadphises 36, 38
  problem of 57
  Wima Kadphises 48
  Wima Takto 42, 44, 45
Rabatak shrine *vi*, *43*, 65, 66–7, *111*
Rag-i Bibi relief *72*, 97, 110
Rājataraṅgiṇī (Kashmir chronicle) 28, 71, 83, 97, 98
Rajghat **70**
rājñā (king) 91
Rajuvula (satrap of Taxila and Mathura) 40, *40*, 43, 47
Rama (god) 68, 84
Rapson, Edward James 274, *274*, 275
Rauzat us-Safa 112
Rawlins, James Parke 290
Rawlinson, Sir Henry Creswicke 283, *283*
Ray Dheri hoard **209**, 211
Ray, H.C. 104
re-cut dies *see* dies, as evidence for crisis
Reh inscription 46–7, *53*
relief sculptures *38*, 45, *58*, *59*, 66, *67*, 83, 90, *90*, 97, 112, 251
  see also reliquaries
religious donations 52, 139
reliquaries 59, 61, *61*, 63, *64*, 65, 89, 90, 91, 103
  see also bronze water pot
replica coin 277, *277*
representation systems 2
Reynolds, William 285
Rezakhani, K. 67, 105
Rhodes, Nicholas 71, 295, 296
Rich, Claudius 68, *68*
Rishti (god) **85**, *190*, **191**, 194, **194**
Rodgers, Charles James 286
Rogers, Mrs. (?wife of Col. George W.N. Rogers) 287
Rollin & Feaurdent 286–7
Roman coins 36, *36*, 39, 152
Roman Empire *see* Classical sources; Classical world
Rosenfield, J.M. 80, 93, 94, 105, 276
roundels *see* bronze roundels
Rowland, B. 64
royal courts 61–2
royal images, Kidarites to Hephthalites 131–2, **134–5**
  busts 132, 238, 241, *242–3*
  clothing, tunic 237
  crown 131, 132, 241, *242–4*, 269, *269*
  facial hair and other facial features, beard 237
  hunting scenes 132, *133*
  standing king types 267, 269, *269*
royal images, Kushan 1–2
  accessories and weapons
    battle axe 35, 45
    bow in quiver 35
    cloth 82
    club 45, 49, 50, 51, 58, 59, 79, 81, 82, *148–9*, *167*
    cup 82
    dagger/short sword 45, 107, 229
    elephant goad 59, 65, 82
    foliage/twig/branch 45, 79
    jewellery 81
    sceptre 95, 98, 229
    sceptre/spear 82, *188*
    sceptre/standard 75
    shield 35, *152*
    spear 35, 59, 81, 82, 90, *152*
    standard 59, 79, 81–2, 102, 107
    sword 35, 45, 49, 50, 58, 76, *76*, 81, 82, 89, 90
    trident 50, 51, 59, 90, 95, 107, *206–7*, 208, 226, *226*, 229, *229*
    twig/branch 49, 79, 82, *167*
    umbrella 49, 50
  clothing
    armour 35, 90–1, 95, 98, 102, 103, 204, *204–8*, 217, *218*, 222–3, *223–4*, 224
    cloak 45, 49, 59, 66, *66*, 75, 76, *76*, 81, 82, 89, *189*
    jacket, cross lapelled 35
    leggings 35, 45, 49, 58, 60, 66, *66*, 75, 81, 82, 89, 90, *90*, 95, 98, 102, 103, 107, 215, 217
    lion skin, knotted 37, *149*
    overcoat 45, 49, 50, 58, 60, 76, *76*, 80, 81, 82, 89, *90*, 95, 98, 102, 103, 107, *188*, 215, 217, *218*, 220, *221*, 226, *226*, 227
    sash 107
    suspenders 107
    tunic 45, 49, 58, 60, 66, *66*, 75, 81, 82, 89, *90*, 95, 98, 102, 103, 107, *188*, 215, 217, 229, *229*
  facial hair and other facial features
    beard 45, 49, 50, 59, 66, *66*

clean-shaven 35, 45, 59, *61*, 80, 81
mark on the king's cheek 59–60, 81
moustache 35, 42, *42*, 75, 81, 82, 89, *142*
sideburns 35, 42, *42*, 59, *61*, 81, 82
hair 35, 49, 81, 89, 90
headwear
cap 36, 49, 76, *76*, 79, 107, 229, *229*
crown 226, *226*
diadem 35, 45, 49, 59, 76, *76*
halo 45, 60, 75, 76, *76*, 81, 82, 83, 89, 95, 102, 107
headdress with cheek-pieces 81
headdress with ribbons 75, 76, 81, 89, 90, 95
helmet 35, 90, 95, 98, 102
tall/pointed headdress 35, 45, 49, 50, 59, 66, *66*, 76, 79, 81, 82, 95, 98, 103, 107
turban 81
other features
altar 50, 59, 90, 95, 98, 102, 107, 115
banner 90
Buddha 89
censer 89
chariot 49
flames from shoulder/s 49, 50, 52, 59, 81, 83, 90, 95, 102, *167*
flying victory *26*, 35–6, 45, *142*
pennant 90
three other figures 90
winged child 75
portrait styles 36
postures
blessing, giving of 45, *163*
in a chariot 49, 50, *167*
emerging from the top of a mountain 49, 50, 52, 59, 81, *173*, 187, *189*
hand open or closed 164, 227, 229–30, 233
holding a flower, hand on hip 107, 229
on horseback 35, 45, 79, *142*, 143, *159*, *163*
left hand covered 49, 59, *61*, 79–80, 91, *167*
looking through a window 49, *167*
making an offering 50, 59, 90, 95, 98, 102, 107, *186*, 204, *204–8*, *210–11*, *213*, *218–19*, *221–6*, *228–9*, 229, *231–2*, *234*
standing 35, 58–9, 82, 89, *142*, *173*
postures, seated
behind a parapet 49
on a couch 82, *186*, 195, *195*, *196–7*, 198, *199*
cross-legged on ground 35, *152*
elephant, riding or seated on 50, 76, *76*, 79, 81, *81*, 82, *167*, *186*, 187, 195, *195*, *196–7*, 198, *199*
on a mountain top 49, 50, 52, 81, 82–3, *167*, *186*, 187, *189*, 195, *195*, *196–7*, 198, *199*
on Roman curule chair 35, 36, *152*
on a throne 59, 82, 83, *165*, *186*, 187, 228, *228*
on a throne, animal-legged 45, 80
on a throne, feet on foot-rest 49, 50
royal images, Kushano-Sasanian 116, **117**, 118
busts 116, *246*, 247, *250*, 251, 253, *254–5*, *260–2*, 263, *264*
clothing 116, 118
armour 118, *210–11*
overcoat 212, *213*
Sasanian armour/dress *248*, *250*, 251, *252–3*
tunic, leggings and cloak *247*, 248
hair *250*, 251, 257, *258*, 262
headwear
crown 247, 249, *250*, 251, *252–3*, 253, 255, *255*, 256, 257, 258, *258*, 259, *259*, *260–2*, 262, 263
halo 118, 257
lion-skin headdress 111
other features
altar 115, 118, *247*, 248–9, *250*, 251, 253, *254–5*, 256
artichoke 116, 118, 253, *254–5*, 255, 256, *261*, 262, 263
flames from shoulder/s 118
striped globe ornament 116, 118, 255, *256*, 257, 263, *264*
postures
investiture scene 119, 121, 122, *246*, *250*, 251, 253, *254*, 256, *256*, 257, *260*
making an offering 118, *210–11*, *247–9*, 249, *250*, 251, *252–3*, 253, 255, 257, *260–1*, 262
standing king types 116
Rtveladze, E.V. 6, 179
Rudradaman I (Western Satrap) 70, *71*, 86
Rudradasa (king of the Audumbaras) *47*
Ruru people 123–4

sacadharmathita (steadfast in the true law) 37, 72
Sadaṣkaṇa (Kushan prince) 32, 34
ṣāhī 46, 83, 91, 96
Said, Edward 17
ṣaka 104
Saketa (Ayodhya) *43*, 44, 53, *53*, 68, *111*
Sakyamuni (Buddha) 63
Sale, Florentia, Lady 273, *273*, 277, 280, *280*
Sale, Sir Robert 277–8, 284–5, *285*
Salene (god) *174*, **175**, 177, 178, **178**
Salomon, R. 51
Samatata 71, *111*, 183–4, *184*
Samudragupta (Gupta king) 99, 104, 105, 106, 107, 130, 137–8, 230
gold dinar *105*
Sanchi 70, 98
Sanghol *vi*, 56–7, 99
Sanguo Zhi (History of the Three Kingdoms) 87
Sanskrit 13, 22
see also Epigraphical Hybrid Sanskrit
Sarapis (god) **85**, *188*, 191, **191**
Sarnath *53*, 69
Sasan (Indo-Parthian king) 33, *33*, 34, 45, 47
Sasanian coins 41
Sasanian emperors **106**
Sasanian empire *39*, 55, 87–8, 96–7, 97–8, *111*
Satavahanas 10, *43*
Satna District inscription 108
satraps 62
satyadharmasthita (steadfast in the true law) 72, 73
Schindel, N. 114–15, 116, 122, 124, 125, 127, 247–8
School of Oriental and African Studies 17, 18
Schopen, Gregory 14
Schuessler, A. 32
sculpture *see* portrait sculptures; relief sculptures; reliquaries
Scythians 29

seal impressions 26, *26*, *81*, 96
sealings 26, 69, 96, 113, 128
seals 26, *26*, 46, *46*, 65–6, *66*, *81*
seals, coins used as *99*
Sebeos 128
Secretary of State for India 289
Senavarma inscription 15, 32, 34, 36, 37, 38, 40, 51
Senior, Robert C. 293, 295
Seric cloth 39
Shah-ji-ki- Dheri casket 59, 61, *61*, 65
Shah, R.D. 294
Shaivism 51–2, 137
Shaka (Kushan emperor, *c.* AD 302–42) **21**, **22**, 23, **24**
  chronology, problems of 106–7, **233**
  coins 230, *231–2*, 232–3, **232**
    gold fineness 230, 232–3
  contemporaries and international contacts 107–9
  historical account 104–6
  name and titles, forms of 107
  religious connections and imagery 107
  royal images 107
Shami prince 35
Shaoreoro (god) **85**, *188*, **191**, 193
Shapur I (Sasanian emperor, AD 240–70) 23, 97, *97*, 100, 221, 251
Shapur II (Sasanian emperor, AD 309–79) **21**
  coins 257–8, *259*, 264
  historical account 105, 108, 113–14, **131**, 230
  imitation coins 233
  representations of **117**
  titles **120**
Shapur III (Sasanian emperor, AD 383–88) 135
Sharma, G.R. 46
Sharma, R.S. 13
Sharma, S. 10
Shepherd, John 280
Shiji (Chinese chronicle) 30
Shrava, S. 22
Shrimali, K.M. 109
silk 39–40
silver coinage 16, 140
silver coins, other
  Adomano, Hephthalite king of the East *130*
  Ashtat, ruler of the Sogdian city state of Nakhshab 42, *42*
  Aspavarma, general of the Apracaraja kingdom 40, *41*
  Augustus, Roman emperor 36, *36*, *152*
  Gondophares, Indo-Parthian king 26, *26*
  Heliocles, Graeco-Bactrian king *146*
  Jihonika, Indo-Scythian satrap 40, *40*
  Kunindas *47*
  Mepama (Mehama) (Alchon Hun ruler) *130*
  Mihirakula (Alchon Hun king) *138*
  Mujatria, satrap of Nagarahara 25, *25*, 40
  Rajuvula, satrap of Taxila and Mathura 40, *40*
  Rudradaman I, Western Satrap 70, *71*
  Sasan, Indo-Parthian king 33, *33*
  Shapur I, Sasanian emperor 97, *97*
silver dishes 132, *133*
Sima Qian (Chinese historian) 30
Simmons & Simmons 294
Simonetta, A. 41
Sims-Williams, N. 29, 36, 45, 51, 60, 96, 124, 125
Sind *27*, *31*, 122, 140, 142
  coin production centres 33, 34, 37
  Kujula Kadphises 158
Sinisi, F. 52
Sircar, D.C. 104
Śiva (god) 37–8, 51, 52, 72, 84
Skanda (god) see Skando
Skandagupta (Gupta king) 138
Skando-Komaro Bizago (gods) *188*, **191**
Skando-Komaro Maaseno Bizago (gods) **191**
Skin, Mrs. K. 293
Skinner, M. 22, 55, 69, 93–4, 97
Small Yuezhi 27, 62, 123
Smith, Robert 284
Smith, Vincent, A. 4–6, 11, 15, 18, 98, 146, 158, 165, 290
sociology of knowledge 8, 14, 18
Socotra *39*, 40
Sodasa (Indo-Scythian satrap of Mathura) 43, *43*
Sogdia *27*, *31*, 41, *43*, *72*, *111*, 128, 129–30
Sogdian coins 42, *42*
Sogdian merchants 42
Song Yun (Chinese Buddhist monk) 67, 137
Sonkh coin-like piece 58, 73, 74
Soter Megas coins 141, 159–65
  Begram mint 159–60, *159*, **160**
  imagery of 79
  of Kujula Kadphises 25, 34, 35, 37, 38, 144, 153
  local coinage 161, *161–3*, 163–5
  Pakores overstrikes 47
  of Wima Takto 33, *33*, 43, 44, 45, 47
Soviet archaeology 6
Spink & Son Ltd 290, 294
Sravasti *53*, 69
Sri Campa 53, *53*
Sroshard (god) 64, 65
standards *see* gold fineness; weight standards
Stein, Sir Marc Aurel 3, 64, 296
Stephen, Sir Henry 292
Steuart, Claude Scott 283
Steuart, John Robert 282
Stockden, W.J. 292
Strabo (Greek historian) 30
Stubbs, R.H.A. 285
Sugden, Keith 294
Sui Shu (Chinese chronicle) 116
Sui Vihar inscription *vi*, 55
sun god 38, 47
  see also Miiro (god)
Sundermann, W. 111
Surkh Kotal *vi*
  coins 93, 179
  Huvishka coins 198–9
  inscriptions 60, 72, 73, 83
  Kanishka I coins 183
  sanctuary 73
  sculpture 45, 60, 80
Surya (god) 80
svami 37

svayabala 60
svayab[h]alasa (who is his own army) 51
svayaṃbala 98
svayaṃ[h]alaṣa 51
Swat *27*, *31*, 34, 63, *72*, 113, 128
  Kujula Kadphises coins 156
  silver dish 132, *133*
sylloges 7, 16

Taasob, R. 145
al-Tabari (Muslim historian) 23, 88, 92
Takht-i Sangin hoard 166, 171
Talbot, Milo G. 290
Talbot, Walter Stanley 289, 291
tamgas
  Alchon Hun 129, *130*, 132
  Hephthalite 132
  Kidarite Huns 259, *261*
  Kushan 25–6, *25–6*, 42, 52–3
    reverse images 228–9, *228*
  Kushano-Sasanian 113
Tanabe, K. 60, 76, 80
Tandon, P. 51
Tang-i Sarvak 83
Taranatha (Buddhist historian) 101
Tarim Basin *27*, *31*, *43*, 52, 54, *111*
Taxila *vi*, *27*, *31*, 33, 34, *72*, 145–6
  coins circulated 140, 141
  excavations 6, 15
  Huvishka coins 198
  imitation coins 153
  Kanishka I coins 179, 183
  Kujula Kadphises coins 147, *149–52*, 151, 157–8
  late kings Mahi, Shaka, Kipunadha and Meśra 233
  Soter Megas coins 160, 161
  Vasishka coins 223
Taxila(?) mint
  Kushano-Sasanian coins, Shapur II 258, *259*
Taxila Museum 3, **4**
Taxila or Peshawar mint
  Kanishka II 215, **216**, *218*
  Kushano-Sasanian coins 209
  Vasishka **216**, 220–2, *221*, 223
  Vasudeva I *206*, 208, 209
Teiro (god) *190*, **191**, 193
Templar, W.J. 289
Temple, Richard Carnac 287–8, *288*
Tepe Maranjan hoard 106–7, 129, 130
Termez *27*, 31, *31*, 33, *72*, 145
textile fragments 35, 40, 75–6
textile trade 39–40
Thackray, Paul 296
Thapar, Romila 15
Thierry, F. 31, 32–3
Thomas, Edward 283
Tiandu 32, 40, 43, 44, 71
Tillya Tepe 35, 36, 172–3
Tobazino (Kidarite ruler, *c.* AD 430–5) **21**, 124, 133, 135, 264, 267
Tocharoi 27–30
Tochi Valley inscriptions *72*, 125
token 279, *279*
Tokharistan 27–8, *27*, 29
  Kujula Kadphises coinage 141, *142*, *146*
  see also Bactria/Tokharistan
Tolstov, S.P. 52, 53
Tope Kelan relic deposit *72*, 132, 133, 137, 244
Tor Dherai 100
Toramana (Alchon Hun king) 133, 244
Tordher hoard 217
towns 31, *31*
Townsend, Mark 295
trade 38–9, 86
trade routes 39, 40, 42
tratara (saviour) 98
trial coin 170
tribute 32
Tsa pao-tsang ching 62
Turfan *27*, *31*
Tyche (goddess) 47
Tye, Robert 293
Tyler-Smith, S. 122
type catalogues 1, 2, 5, 7, 9, *9*, 14, 16

Ujjain 70
Umma (goddess) 64–5
units of value 139
usurpers 22–3
Uttar Pradesh 71
Uttar Pradesh State Museum 4

Vainberg, B.I. 52
Vaisali *43*, 52, 53
Vajrapani (Buddha's attendant) 37, *38*
Valdettaro, Carlo 294–5
Valerian I (Roman emperor, AD 253–60) 97
value, measure of 139
Van den Bergh, Henry 291
van Lohuizen-de Leeuw, Johanna 22, 55, 58, 93
Varahran (Kushano-Sasanian king, *c.* AD 330–59) **21**
  coins 237, 258–9, *260–1*, 262–3
    Kidarite coins in the name of *262*, 263–4, *264*
    silver drachm 9, *9*
  historical account 106, 110, 112, 113
  and Kidarite Huns 133, 140
  representations of **117**, 119, **134–5**
  and Sasanians **131**
  titles 118, **121**
Vasishka (Kushan emperor, *c.* AD 246–67) **21**, **22**, **24**
  chronology, problems of 57–8, 98
  coins
    copper coinage 222–4, *223*
    forgery of a dinar 281, *281*
    gold coinage **216–17**, 220–2, *221–2*
  contemporaries and international contacts 98–101
    Begram 'treasure rooms' 98–9
    Kotas 99, *99*
    Paratarajas 100–1, **100**
  historical account 74, 97–8
  name and titles, forms of 60, 98

religious connections and imagery 98, *99*
royal images 98
Vasudeva I (Kushan emperor, *c.* AD 190–230) **21**, **22**, **24**
chronology, problems of 88–9
coins
coin design function and production system 207–9
consolidation of system 204–7, *204–8*
bomb-damaged coins 281, *282*
gold coinage, changes in fineness 208
Kushano-Sasanian imitations of 209, **209**, *210–14*, 211–14, 219–20
production centres 166, *166*
replica dinar 277, *277*
contemporaries and international contacts 92–3
historical account 87–8, **89**
name and titles, forms of 91
religious connections and imagery 91–2
royal images 89–91
tamga 25, *25*, 26
Vasudeva II (Kushan emperor, *c.* AD 267–97) **21**, **22**, **24**
chronology, problems of 57–8, 89, 103, **233**
coins
copper coinage 226, 228–9, *228*
gold coinage 225–8, *226*, **227**
gold fineness 227
contemporaries and international contacts 103–4
historical account 102–4
name and titles, forms of 103
religious connections and imagery 103
royal images 89–90, 103
Vasudeva imitations 209, **209**, *210–14*, 211–14
Vasudeva Krishna (god) 91–2
Vasula (Jain nun) 58
Vaux, William Sandys Wright 274–5, 278
Ventura, Jean-Baptiste 76, *76*, 278
Victory (goddess) 26, 35, 36, 45, 143, 153, *154*
see also Oanindo, Nike
Vienna School numismatics 6, 8
Vishaka (god) *see* Bizago
Vishnu-like deity 84, **84**
Vondrovec, K. 129

Wakhsh valley 31, *31*, 33, 141, 142–3, 156
Walker, John 275
Wang, Helen 275, 276, 296
Wang Wei 296
Wardak 73, *74*
warfare 104, 123, 232
Warmington, E.H. 39
Watson, G. 293
Wei Shu (Chinese chronicle) 87, 92, 123, 128–9, 130
weight standards
Kushan coins
Huvishka 73–4, 198
Kanishka II *219–20*
Kanishka III 224
Kipunadha 233
Kujula Kadphises *150*, 151, 153, 158
Mahi *230*
Shaka *232*, 233
Soter Megas coins 141
Vasishka 222
Vasudeva I 204, 208
Vasudeva II *225–6*, 229
Wima Kadphises 170
Wima Takto 44
Kushano-Sasanian coins
Hormizd I *254–5*
Hormizd II *256*
Peroz I 248, *248*, 249, 251
Peroz II *258*
Shapur II 258, *259*
Varahran *260*, 263, *264*
see also Attic weight standard and Indian weight standard
Weilue (Chinese chronicle) 44
Western Satraps *39*, *43*, 70–1, *111*
Whitehead, Richard Bertram 5–6, 38, 290, *291*
Whitfield, S. 93
Williams, Richard 294
Wilson, D.G. 28
Wilson, H.H. 272, *273*, 275
Wima Kadphises (Kushan emperor, *c.* AD 113–27) 6, 16, 17, **21**, **22**, **24**
chronology, problems of 48–9, 57
coins
fire-damaged coins 281, *282*
forgery of a dinar 281, *281*
imperial coins 166, *167–9*, 170–2, *196*
production centres 165, *166*
votive coins 172–3, *172*
contemporaries and international contacts 52–3
historical account 48, 72
copper coins found in northern India 52, 55–6
name and titles, forms of 50–1
religious connections and imagery 51–2
religious donations 52, 139
royal images 49–50
tamga 25, *25–6*, 26, 52–3
Wima Takto (Kushan emperor, *c.* AD 90–113) 14, 17, **21**, **22**, **24**, **35**
chronology, problems of 34, **35**, 44, 57
coins 141, *141*, *164–5*, 165 *see also* Soter Megas coins
contemporaries and international contacts 47–8
historical account 32, 33, 34, 42–4, 72–3
coin production centres 44
coins 42, 43, 44
empire 43, *43*, 44
inscriptions 42, 44
sources 42, 44
name and titles, forms of 45–7
religious connections and imagery 47
royal images 36, 44–5
tamga 25, *25*, 42
women *see* gender
wooden documents 27, 30
Woodfield, Miss A. 292
Woodhouse, James 286
World War II impact on British Museum 281, *282*, 288, 296
Wright, Henry Nelson 290–1

xiao yuezhi/ xiaoyuezhi
see Small Yuezhi
Xie (Kushan viceroy/general) 32–3, 48
xihou ('harmonious noble' or 'allied noble') 23, 29
Xinjiang 67
Xuanquanzhi documents found at 30
Xuanzang (Chinese Buddhist monk) 48, 62, 67, 137

yabgus 22, 23, 27, 29, 30, 31, 141–2, 145
Yaudheya *vi*, *43*, 108, *111*
Yaudheya coinage 47–8, *48*, 57, 68, 86–7, *87*
Yavana military activity 54
Yavanajātaka (Indian astrological text) 23, 57, 125
yazata (god) 249, 311, 313
Yazdagird II (Sasanian emperor, AD 438–57) - 124, 128, 129, 131
Yodhavade (Kushan official) 84, 187, 198
Young, Mathew 278, 279, *279*
Yu Taishan 32, 42, 44, 128
Yuezhi *see* Da Yuezhi
Yuga Purāṇa 54

Zabokho (Alchon Hun ruler) 129, 135
Zar Tepe 76
Zavyalov, V.A. 76
Zeda inscription 96
Zeionises *see* Jihonika
Zeus (god) 37, 82, 145, *148*, 153, *154*, 158, 161, *161*, *163*, 164
Zeymal, E.V. 6, 52, 86, 92, 93, 128, 172, 179
Zhang Qian (Chinese emissary) 29–30
Zhou Shu (Chinese chronicle) 116, 118
Zoroastrianism 64, 65, 66, 118, 119, 135, 137, 248–9